



POSTDOCTORAL POSITION IN BIOPHYSICS

Department of Physics, Universidad de los Andes, Bogotá, Colombia

The Department of Physics at Universidad de los Andes invites applications for a postdoctoral position in Biophysics, to work in one of the following research areas within our Biophysics group:

- **Systems and Synthetic Biology** (Prof. Juan Manuel Pedraza): Information processing within cells, stochastic gene expression and noise propagation in gene networks, cell-size control and division in bacteria, design of synthetic gene circuits, and the evolution of cooperation, combining single-cell experiments with stochastic modeling.
- **Membrane Biophysics** (Prof. Chad Leidy): biophysical properties of bacterial membranes, with emphasis on *Staphylococcus aureus*; how lipid composition, carotenoids and cardiolipin shape membrane thermodynamic and mechanical properties; and the interaction of antimicrobial peptides with liposomes and model membranes.
- **Microscopy** (Prof. Manu Forero-Shelton): light-sheet fluorescence microscopy and applications to diffusion dynamics in yeast cells, applications in zebrafish imaging, and development of low-cost microscopy and instrumentation.

The successful candidate will join an active and collaborative research environment with opportunities to interact with faculty and students across several areas of experimental and theoretical biophysics, and with collaborators in the Schools of Medicine, Biological Sciences and Chemistry. The selected candidate will have a small teaching load per semester (3 hours per week), lecturing a first-year undergraduate physics course.

Position details:

- Start date: January 20, 2027
- Duration: 1 year, renewable for a second year upon mutual agreement, candidate performance and funding availability

Qualifications:

- Ph.D. in Physics, Biophysics, or a closely related field.
- A strong background relevant to one or more of the target research areas (membrane biophysics, lipid biophysics and antimicrobial peptides, optical microscopy and instrumentation, intracellular diffusion, systems and synthetic biology, stochastic modeling of gene expression)
- Demonstrated ability to conduct independent research
- Interest in interacting with and mentoring graduate and undergraduate students
- Good command of English or Spanish

Application materials:

- Curriculum vitae with list of publications
- Brief statement of research interests (1–2 pages), indicating preferred research group(s)
- A list of emails of at least three people who could provide a reference

How to apply:

Applications must be submitted online at: <https://fisicaconvocatoriasp.uniandes.edu.co/>

For informal inquiries or further information, please contact:

- Systems and Synthetic Biology group, Prof. Juan Manuel Pedraza, jmpedraza@uniandes.edu.co
- Membrane Biophysics group, Prof. Chad Leidy, cleidy@uniandes.edu.co
- Microscopy group, Prof. Manu Forero-Shelton, anforero@uniandes.edu.co

About Universidad de los Andes: Universidad de los Andes is Colombia's leading private research university, consistently ranked #1 in Colombia and among the top 10 universities in Latin America according to QS World University Rankings. Located in the heart of Bogotá, Colombia's vibrant capital city at 2,640 meters above sea level, the university is renowned for its academic excellence, international collaborations, and strong research programs.

Deadline for application:
November 9th, 2026

Position starting date:
January 20, 2027