

UNAB Research Centers and Institutes

Center/Institute	Faculty	Line of research	Link web	Director
Quintay Marine Research Center CIMARQ	Faculty of Life Sciences	<ul style="list-style-type: none"> Coastal Ecology and Ecophysiology Climate Change, Coastal Ecology and Marine Pollution Fisheries Biology and Trophic Ecology Biotechnology and Algae Cultivation Cultivation of Marine Biotechnology Artisanal Fishing and Extreme Zones Biology, reproduction and cultivation of Pathology in Aquaculture Cultivation and restocking of fish and marine invertebrates 	https://cimarq.unab.cl	Juan Manuel Estrada mestrada@unab.cl
Plant Biotechnology Center CBV	Faculty of Life Sciences	<ul style="list-style-type: none"> Plant-pathogen interaction Signaling and plant development Genome regulation Cell wall in plants Sustainability 	https://cbv.unab.cl	Ariel Orellana López aorellana@unab.cl
Sustainability Research Center CIS	Faculty of Life Sciences	<ul style="list-style-type: none"> Global Change One Health Biodiversity Conservation 	https://cis.unab.cl/	Claudio Azat Soto claudio.azat@unab.cl
Center for Bioinformatics and Integrative Biology CBIB	Faculty of Life Sciences	<ul style="list-style-type: none"> Bionanotechnology and Microbiology Genomic Bioinformatics Protein Engineering Chemical Synthesis and Drug Discovery Molecular Physiology 	https://vinculacion.unab.cl/servicios/cbib-centro-de-bioinformatica-y-biologia-integrativa/	Fernando Danilo Gonzalez Nilo fernando.gonzalez@unab.cl
Center for Systems Biotechnology CSB	Facultad de Faculty of Life Sciences	<ul style="list-style-type: none"> Environmental management Animal and plant health Agricultural ecosystems 	https://csb.unab.cl	Pilar Angelica Parada Valdecantos pilar.parada@unab.cl

		<ul style="list-style-type: none"> • Bioproducts 		
Transport and Logistics Center CTL	Faculty of Engineering	<ul style="list-style-type: none"> • Urban Logistics Laboratory • Sustainable Transport • Network Design Laboratory • Data Science and Artificial Intelligence Laboratory • Logistics in Emergencies and Natural Disasters 	https://ctl.unab.cl/	Julio Ernesto Villalobos Contreras jvillalobosc@unab.cl
Energy Transformation Center CTE	Faculty of Engineering	<ul style="list-style-type: none"> • Renewable energy • Energy transformation and control • Electromobility and storage systems • Power electronics • Intelligent autonomous systems 	https://cte.unab.cl	Freddy Arturo Flores Bahamonde freddy.flores@unab.cl
Institute of Technology for Innovation in Health and Wellness ITISB	Faculty of Engineering	<ul style="list-style-type: none"> • Internet of Things and Cyber-Physical Systems • Digital Transformation and Software Architecture • Applied Artificial Intelligence • Cognitive Systems 	https://itisb.unab.cl	Carla Andrea Taramasco Toro carla.taramasco@unab.cl
Theoretical and experimental center for particle physics CTEPP	Faculty of Exact Sciences	<ul style="list-style-type: none"> • High-energy theoretical physics • Experimental data analysis • Big Data and Grid computing and applications • Design, construction and testing of particle detectors • ATLAS Phase I and Phase II upgrades (CERN) • Applied physics: detectors for medical physics, mining and geophysics • Detectors for gamma ray astronomy at very high energies (for CTA observatory) 	https://ctepp.unab.cl	Sergey Kuleshov Vasilievich y Jilberto Antonio Zamora Saa jilberto.zamora@unab.cl
Research Center for Materials Design CEDEM	Faculty of Exact Sciences	<ul style="list-style-type: none"> • Development of new materials for advanced technological applications • Theoretical and computational modeling • Simulation of material properties 		William Tiznado Vasquez wtiznado@unab.cl
Institute of Astrophysics IA	Faculty of Exact Sciences	<ul style="list-style-type: none"> • Planetary Sciences • Stellar Astrophysics • Galactic Astrophysics • Extragalactic Astrophysics • Cosmology • Gravitational Waves 	https://astrounab.cl	Matias Gomez Camus matiasgomez@unab.cl
Institute of Biomedical Sciences ICB	Faculty of Medicine	<ul style="list-style-type: none"> • Mechanisms associated with neuronal plasticity • Mechanisms associated with neurological and neurodegenerative diseases • Epigenetic control of cell differentiation and development • Molecular bases of learning and memory • Mitochondrial function and metabolic reprogramming 	https://icb.unab.cl	Martín Montecino Leonard mmontecino@unab.cl

		<ul style="list-style-type: none"> • Cell therapy in the treatment of pathologies • Genomic and epigenetic editing in the treatment of relevant pathologies • Mechanisms associated with infection by intestinal pathogenic bacteria • Intracellular signaling and gene regulation • Identification of new bioactive natural molecules • Influence of viruses and viral-like sequences on their hosts • Epigenetic control of transposable elements and heterochromatin and their impact on the development of diseases • Mechanisms mediated by non-coding RNAs and their role in pathology 		
Institute of Exercise and Rehabilitation Sciences ICER	Faculty of Rehabilitation Sciences	<ul style="list-style-type: none"> • Musculoskeletal rehabilitation. • Neurorehabilitation. • Exercise Sciences for Health. • Mental Health and Cognition Rehabilitation. 	https://www.linkedin.com/company/instituto-de-ciencias-del-ejercicio-y-la-rehabilitaci%C3%B3n-unab/	Rodrigo Antonio Araneda Oyaneder rodrigo.araneda@unab.cl
Urban Research Center for Development, Habitat and Decentralization CIUDHAD	Creative Campus, Faculty of Engineering and Faculty of Economics and Business	<ul style="list-style-type: none"> • Territorial Inequality • Urban Metabolism • Urban Health and Wellbeing 	https://campuscreativo.cl/investigacion-y-creacion/centro-ciudhad/	Beatriz Mella Lira beatriz.mella@unab.cl
Health Care Research Institute IICS	Faculty of Nursing	<ul style="list-style-type: none"> • Health Systems: Evaluation and innovation to strengthen humanized and digital health systems, including staff care. • Non-Communicable Chronic Diseases (NCDs): Prevention and intervention strategies in NCDs for healthy aging. • Mental Health: Analysis and promotion of protective factors for mental health in adults and older adults. 	N/A	Naldy Febre naldy.febre@unab.cl