OPEN CALL

Postdoctoral Researchers

SENTINET

Surveillance, Epidemiology, and New Technologies for Infectious Emerging Threats

SENTINET (Surveillance, Epidemiology, and New Technologies for Infectious Emerging Threats) is a research center funded by Chile's National Agency for Research and Development (ANID) through the program *Centros de Investigación y Desarrollo de Excelencia de Interés Nacional* (CIN). The center brings together researchers from Pontificia Universidad Católica de Chile (UC, host), Universidad del Desarrollo (UDD, host), Universidad Andrés Bello (UNAB), Universidad Austral de Chile (UACh), and Universidad Mayor (UM), in collaboration with the Instituto de Salud Pública de Chile (ISP) and other governmental institutions, including the Servicio Agricola Ganadero (SAG) and the Ministry of Health (MINSAL). SSENTINET's vision is to become a rigorous and policy-oriented scientific platform where advanced integrated surveillance systems, genomic-based diagnostics, and real-time data analytics transform the way infectious disease threats and impacts are detected, contained, treated, and prevented, with individuals and communities.

The center is organized around three Research Areas — (RA1) Emerging and re-emerging infections of pandemic potential, (RA2) Control strategies for prevention, diagnosis, and therapy, and (RA3) Emergency preparedness and response, supported by seven interdisciplinary Research Cores (RC1–RC7).

SENTINET hereby opens a call for Postdoctoral Researchers to join the center and contribute to its research activities. Detailed profiles for each Research Core are provided in the Annex.

1. POSITION DESCRIPTION

The center seeks to recruit Postdoctoral Researchers (Investigadores/as Postdoctorales) who will work within one or more of SENTINET's Research Cores under the supervision of a senior investigator.

Postdoctoral Researchers are expected to:

- Design, lead, and deliver a coherent research agenda with clear aims, milestones, and deliverables, aligned with the objectives of the assigned Research Core(s) and the center's broader mission.
- Build an independent research portfolio, aligned with the objectives of the Research Core(s) and the center's broader mission.
- Lead the generation of high-impact scientific publications and conference presentations.
- Participate actively in the center's collaborative research agenda, surveillance network, and cross-core initiatives.
- Co-supervise and mentor graduate and undergraduate students.

- Develop competitive grant proposals as PI or co-PI, including applications to ANID.
- Participate in SENTINET's training programs, workshops, and annual symposia.

The Research Cores and specific research topics available for this call are described in the Annex.

2. REQUIREMENTS

Applicants must meet the following requirements:

a) Hold a doctoral degree (PhD or equivalent) in a discipline relevant to the selected Research Core (see Annex). The degree must have been conferred no more than three (3) years before the application deadline, with allowable extensions for documented career interruptions (e.g., parental leave, major illness, caregiving, or national service). Candidates who have submitted their thesis and are awaiting defense may also apply, provided they can certify the date of the expected defense.

b) Demonstrate a track record of scientific productivity appropriate to the career stage, including peer-reviewed publications and/or conference contributions.

c) Have research interests and expertise aligned with at least one of SENTINET's Research Cores (RC1–RC7).

d) Be available to work full-time and reside in Chile for the duration of the appointment.

e) Language requirements: Proficiency in English is required. Spanish proficiency (B2 or above) is desirable.

f) Candidates of all nationalities and backgrounds are eligible and strongly encouraged to apply. SENTINET is committed to diversity, equity, and gender balance in its recruitment.

3. BENEFITS

SENTINET offers the following benefits to Postdoctoral Researchers:

- **Monthly stipend:** A competitive monthly stipend in accordance with ANID standards for postdoctoral positions, funded for the duration of the appointment ($2.690.000 Chilean pesos).
- **Duration:** Positions are funded for an initial period of two years, renewable for up to three (3) years, subject to satisfactory performance evaluations and center funding. Postdocs are required to apply for ANID postdoctoral support.
- **Research budget:** Access to dedicated research funds for consumables, equipment use, fieldwork, and travel to conferences, publication fees, and collaborating institutions, as stipulated in SENTINET protocols. Additional internal pilot calls will be available.
- **Mentorship:** Each postdoctoral researcher will work under the direct supervision of one or more senior SENTINET investigator(s) and will receive additional career development support from the center's leadership.

- **Access to infrastructure:** Full access to SENTINET's shared research infrastructure, including BSL-2 and BSL-3 laboratories, genomic sequencing platforms (Oxford Nanopore, Illumina), high-performance computing resources, and the nationwide macrozone surveillance network.
- **Interdisciplinary environment:** Integration into a vibrant, multidisciplinary research community spanning five universities and a national reference laboratory, with regular cross-core collaboration opportunities.
- **Training and professional development:** Participation in SENTINET's workshops, seminars, annual symposium, specialized training programs, and support for international conference attendance and short research stays.
- Access to host-institution benefits (health, pension, parental leave) depending on contract type.

4. DOCUMENTS TO SUBMIT

Applicants must submit the following documents compiled into a single PDF file:

1. **Curriculum Vitae:** A comprehensive CV (maximum 5 pages) including education, employment history, publications, grants, awards, teaching experience, and relevant professional activities. Provide ORCID and Google Scholar profile links.
2. **Research Proposal:** A brief research proposal (maximum 2 pages) describing the intended work within the selected Research Core(s), including objectives, methodology, and expected outcomes for the first 18 months.
3. **Motivation Letter:** A letter (maximum 1 page) explaining the applicant's interest in SENTINET, the specific Research Core(s) they wish to join, and how the position fits their career trajectory.
4. **Letters of Recommendation:** Two (2) confidential letters of recommendation, including one from the doctoral thesis advisor. Letters must be sent directly by referees to the application email address.
5. **Proof of Doctoral Degree:** A copy of the doctoral diploma or an official certificate confirming the degree and date of conferral. Candidates awaiting defense must submit a letter from their advisor confirming the expected defense date.
6. **Copy of national identity document or passport.**

File naming convention: SENTINET_Postdoc_[FamilyName]_[Core]_Application.pdf

5. POSITION RESPONSIBILITIES

Postdoctoral Researchers appointed through this call will be expected to:

- Devote 100% of their working time to SENTINET research activities. Up to 10–20% teaching or external service may be approved if aligned with career development.
- Apply annually for postdoctoral funding programs, such as ANID or similar programs.
- Lead or co-lead grant applications (e.g., FONDECYT, Wellcome Trust) with center support.

- Execute the research plan approved by the supervising investigator and the center's leadership. Constant communication and collaboration with the supervising investigator and associated researchers are essential for development and continuity.
- Publish results in high-quality peer-reviewed scientific journals (target: on average one first-author publication per year, commensurate with field and role).
- Participate in the center's surveillance network activities, data collection, and sample processing as relevant to their Research Core.
- Co-develop policy briefs, public health guidance, and infodemic-management materials as relevant to the core.
- Co-supervise and mentor graduate students (Master's and/or PhD) and undergraduate students.
- Participate in SENTINET's meetings, workshops, annual symposium, and training activities.
- Contribute to outreach, knowledge translation, and science communication activities.
- Submit progress reports as required by ANID and the center.

6. RESTRICTIONS

The following restrictions apply:

- Postdoctoral Researchers may not simultaneously hold another paid position at a university or research institution during the duration of their SENTINET appointment.
- The position is funded by ANID through the CIN program. Continued funding is subject to the center's performance evaluations and ANID's funding conditions.
- Postdoctoral Researchers must comply with all applicable regulations of ANID and the host institution, including rules regarding intellectual property, ethical review, and financial reporting.
- Researchers currently funded by ANID through another postdoctoral fellowship (e.g., FONDECYT Postdoctorado) may not simultaneously receive funding through this call unless the existing funding ends before the start date.

7. EVALUATION

Applications will be evaluated by the relevant Research Core leaders and the SENTINET Selection Committee, composed of the center's Director, Deputy Director, and senior investigators. External reviewers may be invited as needed. All evaluators will declare and manage conflicts of interest.

The evaluation will consider the following criteria:

Criterion	Weight
Scientific productivity and track record	25%
Quality and Feasibility of the Research Proposal	30%

Alignment with the Research Core's priorities and SENTINET's mission	20%
Methodological expertise and technical skills	15%
Letters of recommendation	10%

Shortlisted candidates will be invited for a virtual or in-person interview with the relevant Research Core leaders and members of the Selection Committee. The interview will include a brief presentation of the research proposal (15 minutes) followed by a discussion.

8. COMPETITION RESULTS

Results will be communicated to all applicants via email. The Selection Committee's decision is final and not subject to appeal.

The center reserves the right to declare the competition void if no candidate meets the required standards, or to call for additional applications if positions remain unfilled.

Selected candidates will be required to confirm acceptance within 10 business days of receiving the offer.

9. APPLICATION AND DEADLINES

Applications and reference letters should be submitted electronically to:

Email: juan.ugalde@unab.cl

Subject line: *"SENTINET Postdoctoral Application – [Full Name] – [Research Core]"*

Milestone	Date
Call publication	March 12, 2026
Application deadline	March 31, 2026
Notification of shortlisted candidates	April 3, 2026
Interviews and research seminars	April 6 - 15, 2026
Final results communicated	April 19, 2026
Expected start date	May 4, 2026

ANNEX

Research Core Profiles for Early Career Scientists

The following tables describe each Research Core available under this call, including its thematic focus, desired candidate characteristics, nature of the work, and senior investigators.

RC1 – Viral Infections

Description	Surveillance, genomic characterization, and study of emerging and re-emerging viral pathogens (SARS-CoV-2, influenza, hantavirus, arboviruses). Includes phylodynamic analyses, host-pathogen interactions, and development of molecular diagnostic tools across macrozone sentinel sites.
Desired Candidate Profile	PhD in virology, molecular biology, microbiology, or related fields. Experience with viral genomics, next-generation sequencing, cell culture, or BSL-2/BSL-3 laboratory work. Computational virology profiles also welcome.
Nature of the Work	Fieldwork at sentinel surveillance sites, laboratory-based research at BSL-2/BSL-3 facilities, genomic data analysis, and development of diagnostic protocols.
Principal Investigators	Cecilia Vial (UDD), Pablo Vial (UDD)
Associate Investigators	Pedro Jiménez (UC), Marcela Ferres (UC), Cecilia Perret (UC)

RC2 – Bacterial Infections and Antimicrobial Resistance

Description	Antimicrobial resistance (AMR) monitoring, healthcare-associated infections, microbiome studies, antibiotic stewardship, and novel therapeutic strategies. Genomic epidemiology of resistant pathogens and development of rapid AMR diagnostic tools.
Desired Candidate Profile	PhD in microbiology, infectious diseases, clinical medicine, genomics, or related fields. Experience with AMR research, bacterial genomics, clinical microbiology, or antibiotic stewardship programs.
Nature of the Work	Clinical and laboratory-based research, AMR surveillance data analysis, collaboration with hospital networks, and development of diagnostic and therapeutic tools.
Principal Investigators	José M. Munita (UDD), María Elvira Balcells (UC), Juan Ugalde (UNAB)
Associate Investigators	Sara Cuadros (UCM), Lorena Díaz (UDD), Tobias Wenzel (UC), Juan Carlos Hormazabal (ISP), Esteban Paredes (ISP)

RC3 – Advanced Data Analytics and Mathematical Modeling

Description	Bioinformatics, genomic epidemiology, Bayesian statistical modeling, machine learning for outbreak detection, AI-driven surveillance tools, real-time analytical dashboards, and integration of heterogeneous data sources (genomic, clinical, environmental, wastewater).

Desired Candidate Profile	PhD in bioinformatics, biostatistics, computational biology, data science, applied mathematics, or related fields. Strong programming skills (R, Python). Experience with genomic data analysis, statistical modeling, or machine learning applications in health.
Nature of the Work	Computational research, pipeline development, statistical and mathematical modeling, dashboard and tool development, and cross-core data integration.
Principal Investigators	Alejandro Jara (UC), Tamara Fernández (UAI), Juan Ugalde (UNAB)
Associate Investigators	Mauricio Castro (UC), Fabián Flores (UDEC)

RC4 – Health Policy and Economics

Description	Cost-effectiveness analyses of surveillance programs and interventions, economic burden of infectious diseases, health systems preparedness modeling, and policy evaluation frameworks for pandemic response.
Desired Candidate Profile	PhD in health economics, public policy, epidemiology, or related fields. Experience with economic evaluation methods, health systems research, or policy analysis.
Nature of the Work	Economic modeling, policy analysis, cost-effectiveness studies, and stakeholder engagement with public health authorities.
Principal Investigators	Eduardo Undurraga (UC)
Associate Investigators	Pablo Celhay (UC), Baltica Cabieses (UDD), Juan Carlos Hormazabal (ISP)

RC5 – Epidemiology and Burden of Diseases

Description	Epidemiological characterization and disease burden of infectious threats in Chile and the region. Seroprevalence studies, syndromic surveillance analytics, incidence and prevalence estimation, and population-based cohort studies across macrozones.
Desired Candidate Profile	PhD in epidemiology, public health, biostatistics, or related fields. Experience with study design, epidemiological methods, data analysis, and population-level research.
Nature of the Work	Design and execution of epidemiological studies, surveillance data analysis, cohort studies, collaboration with sentinel sites, and public health networks.
Principal Investigators	Gerardo Acosta-Jamett (UACH)
Associate Investigators	Claudio Verdugo (UACH), Eduardo Undurraga (UC), Pedro Jiménez (UC)

RC6 – Emergency Clinical Care

Description	Clinical research on acute infectious disease management, ICU care, patient outcomes, clinical trial design and execution, evaluation of diagnostic and therapeutic protocols in emergency settings, and translational research.
Desired Candidate Profile	PhD or MD/PhD in clinical medicine, intensive care, emergency medicine, or related fields. Experience with clinical research, clinical trials, or patient-centered outcomes research.
Nature of the Work	Clinical research in hospital and ICU settings, trial coordination, data collection and analysis, and translational research from bedside to policy.
Principal Investigators	Alejandro Bruhn (UC)
Associate Investigators	Eduardo Kattan (UC), Marcela Ferres (UC)

RC7 – Community Care and Risk Communication

Description	Community-based research, health literacy, public engagement, culturally appropriate risk communication, participatory research methodologies, and evaluation of communication strategies during outbreaks.
Desired Candidate Profile	PhD in public health, health communication, social sciences, anthropology, or related fields. Experience with community-based participatory research, health education, or risk communication.
Nature of the Work	Community engagement activities, design and evaluation of communication interventions, qualitative and mixed-methods research, and collaboration with local communities.
Principal Investigators	Teresita Rocha Jiménez (UM)
Associate Investigators	Macarena Peña y Lillo (UDP), Báltica Cabieses (UDD), Alexandra Obach (UDD)

OPEN CALL

Early Career Scientists

SENTINET

Surveillance, Epidemiology, and New Technologies for Infectious Emerging Threats

SENTINET (Surveillance, Epidemiology, and New Technologies for Infectious Emerging Threats) is a research center funded by Chile's National Agency for Research and Development (ANID) through the program *Centros de Investigación y Desarrollo de Excelencia de Interés Nacional* (CIN). The center brings together researchers from Pontificia Universidad Católica de Chile (UC, host), Universidad del Desarrollo (UDD, host), Universidad Andrés Bello (UNAB), Universidad Austral de Chile (UACh), and Universidad Mayor (UM), in collaboration with the Instituto de Salud Pública de Chile (ISP) and other governmental institutions, including the Servicio Agricola Ganadero (SAG) and the Ministry of Health (MINSAL). SENTINET's vision is to become a rigorous and policy-oriented scientific platform where advanced integrated surveillance systems, genomic-based diagnostics, and real-time data analytics transform the way infectious disease threats and impacts are detected, contained, treated, and prevented, with individuals and communities.

The center is organized around three Research Areas — (RA1) Emerging and re-emerging infections of pandemic potential, (RA2) Control strategies for prevention, diagnosis, and therapy, and (RA3) Emergency preparedness and response, supported by seven interdisciplinary Research Cores (RC1–RC7).

SENTINET hereby opens a call for Early Career Scientists to join the center and develop independent research programs within its thematic framework. Detailed profiles for each Research Core are provided in the Annex.

1. POSITION DESCRIPTION

The center seeks to recruit Early Career Scientists (Investigadores/as Jóvenes) to join one or more of SENTINET's Research Cores (see Annex) to conduct independent and collaborative research aligned with the center's vision.

Early Career Scientists are expected to:

- Develop and lead an independent research program within the SENTINET framework, including an individual development plan and research milestones.
- Contribute to the center's collaborative, interdisciplinary research agenda across Research Areas.
- Supervise and mentor graduate students and postdoctoral researchers. Eligibility to co-/supervise will be facilitated through host institutions.
- Participate actively and support the coordination of in the center's surveillance network, training programs, workshops, and annual symposia.

- Contribute to the production of high-impact scientific publications, grant applications, and knowledge translation activities. Contributions to open science (data/code sharing) and policy briefs are strongly encouraged.
- Support and help coordinate social communications (e.g., press, social media).

The Research Cores and specific research topics available for this call are described in the Annex.

2. REQUIREMENTS

Applicants must meet the following requirements:

a) Hold a doctoral degree (PhD or equivalent) in a discipline relevant to the selected Research Core (see Annex). The degree must have been conferred no more than eight (8) years before the application deadline.

b) Demonstrate a track record of scientific productivity commensurate with career stage, including peer-reviewed publications, conference contributions, preprints, leadership, or collaboration in competitive research grants.

c) Have clearly defined research interests aligned with at least one of SENTINET's Research Cores (RC1–RC7).

d) Be willing to establish a formal affiliation with one of SENTINET's sponsoring or associated institutions in Chile and to reside in Chile for the duration of the appointment and comply with institutional and ANID policies, including ethics, biosafety, and data governance.

e) *Language.* Advanced English proficiency. Spanish proficiency (B2 or above) is highly desirable.

f) *Research Skills.* Depending on the research core (See Annex).

g) *Availability and residency.* Be available to work full-time and reside in Chile for the duration of the appointment.

SENTINET is committed to diversity, equity, and gender balance in its recruitment. Applications from candidates of all backgrounds and nationalities are encouraged.

3. BENEFITS

SENTINET offers the following benefits to Early Career Scientists:

- **Competitive salary:** A full-time, fixed-term position with a gross monthly salary of $3.000.000 CLP, with a contract with the host institutions (Pontificia Universidad Catolica de Chile or Universidad del Desarrollo) for five years, subject to annual performance and funding availability.
- **Travel support:** Competitive funding for attendance at national and international conferences, workshops, and collaborative visits to partner institutions.
- **Mentorship:** Each Early Career Scientist will be paired with one or more senior SENTINET investigator(s) who will provide mentoring on research strategy, grant writing, publications, and career development.

- **Access to infrastructure:** Full access to SENTINET's shared research infrastructure, including BSL-2 and BSL-3 laboratories, genomic sequencing platforms (Oxford Nanopore, Illumina), high-performance computing resources, and the nationwide macrozone surveillance network.
- **Collaborative network:** Integration into a multidisciplinary network spanning five Chilean universities and a national reference laboratory (ISP, SAG), with regular opportunities for cross-core collaboration and competitive seed funding. Additional collaborators from associated institutions (e.g., UCM, UDEC) participate in specific cores; affiliations can be extended where appropriate.
- **Professional development:** Opportunities to participate in SENTINET's training programs, annual symposia, and international partnerships.
- **Benefits and leave:** Access to host-institution benefits pursuant to Chilean law (health, pension, parental leave), as applicable to the contract modality.

4. DOCUMENTS TO SUBMIT

Applicants must submit the following documents compiled into a single PDF file:

1. **Curriculum Vitae:** A comprehensive CV (maximum 5 pages) including education, employment history, publications, grants, awards, teaching experience, and relevant professional activities. Provide ORCID and Google Scholar profile links.
2. **Research Statement:** A document (maximum 3 pages) describing the applicant's research vision and how it aligns with SENTINET's mission, Research Areas, and Research Cores. Include a brief description of proposed research activities.
3. **Cover Letter:** A motivation letter (maximum 1 page) explaining the applicant's interest in joining SENTINET, career goals, and the Research Core(s) they wish to contribute to.
4. **Letters of Recommendation:** Two (2) confidential letters of recommendation from senior researchers familiar with the applicant's work. Letters must be sent directly by referees to the application email address.
5. **Proof of Doctoral Degree:** A copy of the doctoral diploma or an official certificate confirming the degree and date of conferral.
6. **Copy of national identity document or passport (important to consider additional time to apply and receive a work visa in Chile).**

File naming convention: SENTINET_ECS_[FamilyName]_[Core]_Application.pdf

5. POSITION RESPONSIBILITIES

Early Career Scientists appointed through this call will be expected to:

- Devote at least 80% of their working time to SENTINET research activities. Teaching and external service up to 20% may be allowed, subject to prior approval and alignment with SENTINET goals.
- Apply for national and international funding opportunities.
- Lead or co-lead research projects within their assigned Research Core(s).
- Publish results in high-quality peer-reviewed scientific journals (expected: on average two publications per year over the appointment as first author or corresponding author, commensurate with field and role.
- Participate in the center's surveillance network activities, data collection, and sample processing as relevant to their Research Core.
- Lead the development of policy briefs, public health guidance, and infodemic-management materials as relevant to the core.
- Supervise graduate students (Master's and/or PhD) and, where applicable, postdoctoral researchers.
- Participate in SENTINET's governance, meetings, workshops, annual symposium, and training activities.
- Contribute to outreach and knowledge translation activities aimed at public health stakeholders and the general public (e.g., press and social media dissemination outputs).
- Submit progress reports in accordance with ANID and center requirements.

6. RESTRICTIONS

The following restrictions apply:

- Early Career Scientists may not simultaneously hold another full-time position at a university or research institution during the duration of their SENTINET appointment.
- The position is funded by ANID through the CIN program. Continued funding is subject to the center's performance evaluations and ANID's funding conditions. All publications and outputs must acknowledge ANID and SENTINET in accordance with grant requirements.
- Early Career Scientists must comply with all applicable regulations of ANID and the host institution, including rules regarding intellectual property, ethical review, and financial reporting.
- Researchers who have already held a substantially similar position as an Early Career Scientist (or equivalent) in a previous ANID-funded center are not eligible for this call.

7. EVALUATION

Applications will be evaluated by the SENTINET Selection Committee, composed of the center's Director, Deputy Director, and senior investigators from across Research Cores. External reviewers may be invited as needed. All committee members will declare conflicts of interest and recuse themselves where applicable.

The evaluation will consider the following criteria:

Criterion	Weight
Scientific productivity and track record (relative to opportunity)	20%
Quality and originality of the Research Statement	30%
Alignment with SENTINET's Research Core(s) and mission	25%
Potential for independent and collaborative research	20%
Letters of recommendation	5%

Shortlisted candidates will be invited for a virtual or in-person interview, which will include a research seminar presentation (20 minutes) followed by a discussion with the Selection Committee. The interview may be conducted in English or Spanish, depending on the applicant.

8. COMPETITION RESULTS

Results will be communicated to all applicants via email. The Selection Committee's decision is final and not subject to appeal.

The center reserves the right to declare the competition void if no candidate meets the required standards, or to call for additional applications if positions remain unfilled.

Selected candidates will be required to confirm acceptance within 15 business days of receiving the offer. Offers are contingent upon successful reference checks and, where applicable, background verifications per host-institution policy

9. APPLICATION AND DEADLINES

Applications and reference letters should be submitted electronically to:

Email: juan.ugalde@unab.cl

Subject line: *"SENTINET Early Career Scientist – [Full Name] – [Research Core]"*

Milestone	Date
Call publication	March 12, 2026
Application deadline	March 31, 2026
Notification of shortlisted candidates	April 3, 2026
Interviews and research seminars	April 6 - 15, 2026
Final results communicated	April 19, 2026
Expected start date	May 4, 2026

ANNEX

Research Core Profiles for Early Career Scientists

The following tables describe each Research Core available under this call, including its thematic focus, desired candidate characteristics, nature of the work, and senior investigators.

RC1 – Viral Infections

Description	Surveillance, genomic characterization, and study of emerging and re-emerging viral pathogens (SARS-CoV-2, influenza, hantavirus, arboviruses). Includes phylodynamic analyses, host-pathogen interactions, and development of molecular diagnostic tools across macrozone sentinel sites.
Desired Candidate Profile	PhD in virology, molecular biology, microbiology, or related fields. Experience with viral genomics, next-generation sequencing, cell culture, or BSL-2/BSL-3 laboratory work. Computational virology profiles also welcome.
Nature of the Work	Fieldwork at sentinel surveillance sites, laboratory-based research at BSL-2/BSL-3 facilities, genomic data analysis, and development of diagnostic protocols.
Principal Investigators	Cecilia Vial (UDD), Pablo Vial (UDD)
Associate Investigators	Pedro Jiménez (UC), Marcela Ferres (UC), Cecilia Perret (UC)

RC2 – Bacterial Infections and Antimicrobial Resistance

Description	Antimicrobial resistance (AMR) monitoring, healthcare-associated infections, microbiome studies, antibiotic stewardship, and novel therapeutic strategies. Genomic epidemiology of resistant pathogens and development of rapid AMR diagnostic tools.
Desired Candidate Profile	PhD in microbiology, infectious diseases, clinical medicine, genomics, or related fields. Experience with AMR research, bacterial genomics, clinical microbiology, or antibiotic stewardship programs.
Nature of the Work	Clinical and laboratory-based research, AMR surveillance data analysis, collaboration with hospital networks, and development of diagnostic and therapeutic tools.

Principal Investigators	José M. Munita (UDD), María Elvira Balcells (UC), Juan Ugalde (UNAB)
Associate Investigators	Sara Cuadros (UCM), Lorena Díaz (UDD), Tobias Wenzel (UC), Juan Carlos Hormazabal (ISP), Esteban Paredes (ISP)

RC3 – Advanced Data Analytics and Mathematical Modeling

Description	Bioinformatics, genomic epidemiology, Bayesian statistical modeling, machine learning for outbreak detection, AI-driven surveillance tools, real-time analytical dashboards, and integration of heterogeneous data sources (genomic, clinical, environmental, wastewater).
Desired Candidate Profile	PhD in bioinformatics, biostatistics, computational biology, data science, applied mathematics, or related fields. Strong programming skills (R, Python). Experience with genomic data analysis, statistical modeling, or machine learning applications in health.
Nature of the Work	Computational research, pipeline development, statistical and mathematical modeling, dashboard and tool development, and cross-core data integration.
Principal Investigators	Alejandro Jara (UC), Tamara Fernández (UAI), Juan Ugalde (UNAB)
Associate Investigators	Mauricio Castro (UC), Fabián Flores (UDEC)

RC4 – Health Policy and Economics

Description	Cost-effectiveness analyses of surveillance programs and interventions, economic burden of infectious diseases, health systems preparedness modeling, and policy evaluation frameworks for pandemic response.
Desired Candidate Profile	PhD in health economics, public policy, epidemiology, or related fields. Experience with economic evaluation methods, health systems research, or policy analysis.
Nature of the Work	Economic modeling, policy analysis, cost-effectiveness studies, and stakeholder engagement with public health authorities.
Principal Investigators	Eduardo Undurraga (UC)
Associate Investigators	Pablo Celhay (UC), Baltica Cabieses (UDD), Juan Carlos Hormazabal (ISP)

RC5 – Epidemiology and Burden of Diseases

Description	Epidemiological characterization and disease burden of infectious threats in Chile and the region. Seroprevalence studies, syndromic surveillance analytics, incidence and prevalence estimation, and population-based cohort studies across macrozones.
Desired Candidate Profile	PhD in epidemiology, public health, biostatistics, or related fields. Experience with study design, epidemiological methods, data analysis, and population-level research.
Nature of the Work	Design and execution of epidemiological studies, surveillance data analysis, cohort studies, collaboration with sentinel sites, and public health networks.

Principal Investigators	Gerardo Acosta-Jamett (UACH)
Associate Investigators	Claudio Verdugo (UACH), Eduardo Undurraga (UC), Pedro Jiménez (UC)

RC6 – Emergency Clinical Care

Description	Clinical research on acute infectious disease management, ICU care, patient outcomes, clinical trial design and execution, evaluation of diagnostic and therapeutic protocols in emergency settings, and translational research.
Desired Candidate Profile	PhD or MD/PhD in clinical medicine, intensive care, emergency medicine, or related fields. Experience with clinical research, clinical trials, or patient-centered outcomes research.
Nature of the Work	Clinical research in hospital and ICU settings, trial coordination, data collection and analysis, and translational research from bedside to policy.
Principal Investigators	Alejandro Bruhn (UC)
Associate Investigators	Eduardo Kattan (UC), Marcela Ferres (UC)

RC7 – Community Care and Risk Communication

Description	Community-based research, health literacy, public engagement, culturally appropriate risk communication, participatory research methodologies, and evaluation of communication strategies during outbreaks.
Desired Candidate Profile	PhD in public health, health communication, social sciences, anthropology, or related fields. Experience with community-based participatory research, health education, or risk communication.
Nature of the Work	Community engagement activities, design and evaluation of communication interventions, qualitative and mixed-methods research, and collaboration with local communities.
Principal Investigators	Teresita Rocha Jiménez (UM)
Associate Investigators	Macarena Peña y Lillo (UDP), Báltica Cabieses (UDD), Alexandra Obach (UDD)