









### SUSTAINABILITY REPORT PUCV 2020



#### PONTIFICAL CATHOLIC UNIVERSITY OF VALPARAÍSO

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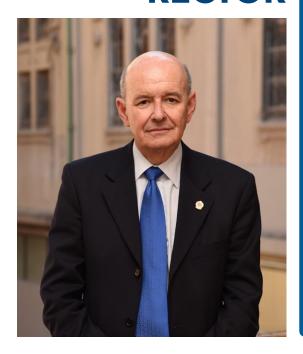
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## MESSGAE FROM THE RECTOR



The 12th Sustainability Report presents the institutional performance during 2020, a period marked by the impact of the Covid-19 pandemic in all areas of university activities.

The health crisis required our lecturers, students and staff to make an effort to adapt to the new operating conditions, which allowed us to maintain our academic and administrative activities, research and public relations, always keeping the care of people as a priority.

To address the pandemic, the University adopted a series of measures aimed at supporting its students, such as the redesign of processes in the area of student welfare services; the implementation of online care systems in the areas of medical, psycho-educational and social services; the creation of support and economic benefits to improve the connectivity of students belonging to the first socioeconomic quintiles, as well as the provision of devices such as tablets and connection scholarships, among many other actions.

In the context of its public vocation, the University mobilized in parallel a set of valuable actions for the benefit of the community, both with traditional public relation initiatives of and a full agenda of artistic-cultural activities and courses, as well as through concrete actions to support the community in the health contingency. Our university provided laboratories of the Faculty of Sciences to contribute to the detection of Covid-19, joining the Network of University Laboratories of Chile.

Similarly, administrative and university governance activities also continued to be carried out in an uninterrupted manner, in non-face-to-face formats, allowing for the complete running of university operations, under the conditions that the crisis allowed, ensuring the labor source and income of workers. During 2020, the self-evaluation process began, with a view to Institutional Accreditation, which meant carrying out virtually all the activities that were previously carried out in person. Given the experience acquired in this area and the commitment of our University Community, we were able to develop this process without major setbacks, proving, from the evaluation carried out, that we have experienced a continuous development in all areas of our work.

In relation to the guideline "University that projects its identity" of the Strategic Development Plan, the academic units have been involved with society from the institutional identity in 71 publicly recognised projects. These instances included the participation of 753 academics from different areas, who made their knowledge available to the community.

Also, within the framework of Institutional Identity, the conference "The identity of the PUCV 30 years after the Ex Corde Ecclesiae" was given by the Apostolic Nuncio of His Holiness in Chile, Monsignor Alberto Ortega, who reminded us that the Catholic university "is an incomparable center of creativity and irradiation of knowledge for the good of humanity (...), the Catholic university shares with other universities the joy of searching for truth, discovering it and communicating it in all fields of knowledge".

With respect to the pilar of "University that generates knowledge", 63 projects were awarded external funding, both nationally and internationally. In this area, 46 Fondecyt projects were awarded, making the University the first in the Fifth Region and sixth at the national level.

In addition, during this period the university allocated its own funds for more than \$600 million to finance a total of 234 projects, of which 97 were promoted through public competitions and 137 through direct allocation and complementary support funds.

On the other hand, dissemination through Web of Science (WOS) publications recorded an increase of 23% over the previous year, rising from 712 in 2019 to 875 publications in 2020. At this level, it should be noted that 74,1% corresponded to publications in the Q1 and Q2 quartiles, i.e., in higher impact journals, and there was an increase in publications in the Scopus database corresponding to 33%.

During 2020, the PUCV adjusted its research and innovation policy, updating it in line with the changes in the national and international scenario, in accordance with the Sustainable Development Goals (SDGs) of the United Nations.

At this level, the University was awarded the "Elsevier-Sustainable Development Award", from the scientific content publisher Elsevier, for the development of research in the Quality Education category, corresponding to the fourth Sustainable Development Goal of the United Nations 2030 Agenda.

Within the scope of "A university that shapes people with a vocation of service to society", the updating of the Institutional Educational Model acquires special relevance, whose main objective is to adapt the training of people to the demands of today's society.

Along with this, the Guidelines for Curricular Design for Undergraduate Degrees and Titles were updated, which refines the previous document Guidelines for Undergraduate Design (2015), and the Advanced Studies Policy.

The Institution is permanently in a process of revision and improvement of its curricula, in order to continuously ensure their relevance. In this context, Civil Engineering in Data Science, Civil Engineering in Construction, Civil Engineering in Telecommunications, Engineering in Bioprocesses and Engineering in Business Administration were created, while 18 other curricula were updated.

On the other hand, 85% of the students received some type of support or assistance for the payment of their tuition, either in terms of free tuition, scholarships, exemptions and/or educational credits, while the Free Tuition Benefit allowed access to higher education to a total of 8,912 students located between the first and sixth decile of socioeconomic income. In relation to postgraduate studies, the Catholic University of Valparaíso awarded 186 scholarships for external ANID financing, in addition to 405 internal scholarships in the categories of tuition, maintenance, thesis completion, research stays, attendance at scientific events, end of thesis, invitation of visiting professors and mentors.

With respect to the "Quality and Sustainable University" guideline, it is important to recognize the efforts made institutionally to care for people in the midst of the pandemic, as well as for maintaining people's jobs.

In this line, the Collective Bargaining Agreement 2020-2022 was signed between the University and the Union N°1 of Workers. Also, in compliance with the Strategic Development Plan, the Quality Assurance Policy was published, which reflects the trajectory that the University has followed in this line and establishes a scope for all its processes, in addition to defining lines of action aimed at strengthening quality.

With regard to the improvement of the efficiency indicators of the undergraduate training processes, the trend towards improved retention of first and third year students, graduation times and timely graduation rates was consolidated.

With the accreditation of four master's and four doctoral programs, the University had 83% of its doctoral and 58% of its master's degrees accredited by 2020.

With respect to infrastructure, during this period the PUCV carried out 32 works of different sizes on its different campuses, with an investment of 5,650 million pesos, highlighting the incorporation of sustainable construction criteria.

A central element in this area is the recovery of the heritage of the Central House, a project co-financed by the Regional Government of Valparaíso, which has made it possible to restore the exterior and interior facades of the building, as well as to carry out comprehensive remodeling of its heritage rooms.

It is also necessary to recognize the progress made in environmental management, with the measurement of the carbon footprint and water footprint, the installation of a recycling system on campuses and sites, as well as the development of environmental standards and protocols.

Finally, in relation to the "University that connects" guideline, the efforts made by our clinical centers, which provided 5,608 services to the community through virtual care, are noteworthy.

The Social Action Program, which is carried out in partnership with social organizations in Valparaíso continued to contribute to the development of vulnerable communities in the city. The Social Incubator maintained its Cycle of the Entrepreneur program in a virtual format, reaching 50 entrepreneurs supported in 2020.

As a further manifestation of our commitment to Sustainable Development, in 2020 we began implementing a project, with funding from MINEDUC, aimed at creating the PUCV Climate Action Center, whose purpose is to provide an interdisciplinary response to address climate change.

In conclusion, I would like to express my appreciation for the commitment of the members of our University Community, who have made possible the continuity of institutional functions in such a difficult and complex context.







### MISSION

The mission of the Pontifical Catholic University of Valparaiso is the cultivation, in the light of faith, of the sciences, arts and techniques through the creation and communication of knowledge and the formation of graduates and professionals with a vocation of service to society, within the value framework of the Magisterium of the Church.

In the exercise of its mission, the University guarantees its members academic freedom and safeguards equal opportunities for students in access to its classrooms.

### VISION

A Catholic University with nationally and internationally recognised academic quality, which projects itself to the world while respecting its identity linked to Valparaíso. It presents a sustained growth in knowledge and shows excellence in the results of its educational processes.

The University manifests an attitude of responsibility towards society through rigorous and innovative actions and a fluid link with the regional, national and international spheres.

Its graduates have the seal of the institutional value proposal, competence for a prestigious professional performance, constant concern for their training, updating and ability to take on tasks in different areas and cultures.

### **VALUES**

The vision that the PUCV has of humanity and its mission is also reflected in the adherence to values that permeate the coexistence of the university community and contribute to the identification of its members with the institutional work. At the centre is the concern for people and, as a consequence, value for Participation, Autonomy, Diversity and Solidarity.



# THE PUCV IN NUMBERS

### ACADEMIC OFFERING **2020**

**62** Undergraduate programs

33 Masters

**51** Postgraduate programs

74 Diplomas

18 Doctorates

### **ENROLMENT 2020**

ENROLMENT 2020	FEMALES	MALES	TOTAL
First year undergraduate students	1.639	1.934	3.573
Total undergraduate students	7.105	9.526	16.631
Total postgraduate students	682	950	1.632
Doctoral students	186	212	398
Masters students	496	738	1.234

### STAFF **2020**

STAFF 2020	FEMALES	MALES	TOTAL
Academic staff	563	867	1.450
Administrative and Service staff	668	612	1.280

### OTHER INDICATORS

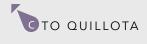
2020

875

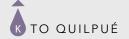
ISI WOS publications

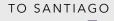
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FONDECYT projects awarded









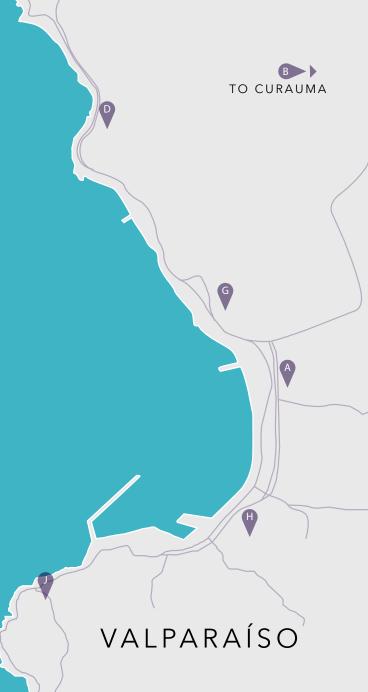
### VIÑA DEL MAR

## CAMPUSES AND UNIVERSITY **BUILDINGS**

The Pontifical Catholic University of Valparaíso has five campuses and other university premises in different locations in the Valparaíso Region and the Metropolitan Region.

The Central House of the University was declared a National Historic Monument in 2003 for its high artistic value. The foundational building, inaugurated in 1928, is located at Avenida Brasil 2950, Valparaíso

- **A. Brasil Campus**
- **B. Curauma Campus**
- **C. Quillota Campus**
- **D. Recreo Ritoque Campus**
- **E. Sausalito Campus**
- F. Viña del Mar Centre
- G. Barón Hill
- H. Concepción Hill
- **I. Miraflores**
- J. Playa Ancha
- K. Quilpué
- L. Providencia, Santiago



### FACULTIES AND ACADEMICS

The PUCV is made up of 9 Faculties and 34 academic units, covering different areas of knowledge.

#### **FACULTY OF ARCHITECTURE AND URBAN DESIGN**

- School of Architecture and Design
- Institute of Art

#### **FACULTY OF SCIENCE**

- School of Kinesiology
- Bachelor of Science Program
- Medical Technology Program
- Institute of Biology
- Institute of Statistics
- Institute of Physics
- Institute of Mathematics
- Institute of Chemistry

#### **FACULTY OF AGRONOMY AND FOOD SCIENCES**

- School of Agronomy
- School of Food Sciences

#### **FACULTY OF OCEAN SCIENCES AND GEOGRAPHY**

- School of Ocean Sciences
- Institute of Geography

#### **FACULTY OF ECONOMIC AND ADMINISTRATIVE SCIENCES**

- School of Business
- School of Business and Economics
- School of Social Work
- School of Journalism

#### **FACULTY OF LAW**

School of Law

#### **FACULTY OF PHILOSOPHY AND EDUCATION**

- School of Pedagogy
- School of Physical Education
- School of Psychology
- Institute of Philosophy
- Institute of History
- Institute of Literature and Language Sciences
- Institute of Music

#### **FACULTY OF ENGINEERING**

- School of Civil Engineering
- School of Biochemical Engineering
- School of Electrical Engineering
- School of Computer Sciences
- School of Construction Engineering
- School of Industrial Engineering
- School of Transportation Engineering
- School of Mechanical Engineering
- School of Chemical Engineering

#### **ECCLESIASTICAL FACULTY OF THEOLOGY**

- Institute of Religious Sciences
- Bachelor of Theology Program

### UNIVERSITY **GOVERNANCE**

During its 92 years of existence, the University's system of governance has allowed it to faithfully fulfil its institutional mission and to grow continuously, with quality and sustainability.

The General Statutes of the University and the respective Organic Regulations formalise the structure of governance, as well as the academic organisation. A central feature of the PUCV's system of governance is that it relies on the service of its own academics to bring it to life, since it is those who are part of the academic career who are called upon to elect or be elected to fulfil the governance functions.

Another distinctive feature of this system is that it seeks to ensure the participation of various bodies in decision-making, through a distribution of the responsibilities that correspond to each of them. In this sense, the participation of students with the right to speak is ensured through their representatives in such important decision-making bodies as the Councils of each Academic Unit, the Councils of each Faculty and the Superior Council.

Those responsible for carrying out the governance functions are the unipersonal and collegiate authorities. The former corresponds to the Grand Chancellor, the highest authority of the University, held by the Bishop of the Diocese of Valparaíso; the Rector; the Vice-Rectors; the Secretary General; the Comptroller; the Deans; the Directors of Academic Units; and the Directors of Centres.

The collegiate authorities correspond to the Plenary Senate, the Academic Chapter, the Superior Council, the Faculty Councils and the Councils of Academic Units.

The PUCV is a legal person under public law in accordance with Chilean law and a public legal person in the Catholic Church. It is an autonomous state university, which receives funding from the state, and is therefore subject to internal control and control by the Ministry of Education.

### SUPERIOR COUNCIL **AND COMMITTEES**

The Superior Council is the highest permanent collegiate authority of government and administration of the University, presided over by its Rector. Its functions include approving, interpreting, modifying and repealing general regulations; approving the appointment of certain authorities; commenting on the Rector's annual account; and approving the budget and overseeing the University's assets.

In addition to the Rector, it is made up of the deans of each faculty; three councillors appointed by the Chancellor; one councillor for each faculty comprising four or more active academic units; and two student representatives, who have the right to speak at the meetings of the Council. The vice-chancellors and general directors also attend as permanent guests.

#### Transparency of the Superior Council's agreements

With the aim of ensuring transparency, in 2020 the General Secretariat began to disseminate the main resolutions adopted at the sessions of the Superior Council via the University's website every three months.

Although these agreements are public and can be consulted at the General Secretariat, the aim of this initiative was to facilitate access to information in this way and to make the university community aware of the work of the higher body.

The Superior Council has four standing committees responsible for overseeing the status of strategic issues in various areas of the institution's activities:

### ACADEMIC AFFAIRS COMMITTEE

Composed of the Dean of the Faculty of Ocean Sciences and Geography, the advisor of the Faculty of Philosophy and Education, the advisor of the Faculty of Science and an advisor appointed by the Pro Grand Chancellor.

### ECONOMIC AND ADMINISTRATIVE AFFAIRSCOMMITTEE

Composed of the Dean of the Faculty of Engineering, the Dean of the Faculty of Economics and Administrative Sciences, the Dean of the Faculty of Agricultural and Food Sciences and the Dean of the Faculty of Sciences.

#### REGULATORY AFFAIRS COMMITTEE

Composed of the Dean of the Faculty of Law, the Dean of the Ecclesiastical Faculty of Theology, a councillor appointed by the Pro-Chancellor and a student representative

#### DEVELOPMENT COMMITTEE

Composed of the Dean of the Faculty of Architecture and Urban Planning, the Dean of the Faculty of Philosophy and Education, the advisor of the Faculty of Engineering, an advisor appointed by the Pro Vice-Chancellor and a student representative.



### UNIVERSITY **SENATE**

The University Senate is a body that embodies the value that the Institution gives to participation, because it brings together the university community to receive the annual account from the Rector and expresses their opinion on matters of a university nature.

The University Senate, which sits once a year, consists of hierarchical professors, student representatives in Faculty Councils, student representatives on the Superior Council and the President of the Student Federation.

During 2020, for the first time in its history, the traditional University Senate was broadcast online due to the pandemic context.

### INDIVIDUAL **AUTHORITIES**

Monsignor Pedro Ossandón Buljevic, Grand Chancellor

Claudio Elórtegui Raffo, Rector

José Luis Guerrero Becar, General Secretary

Fernando Castillo Salfate, Pro Secretary General

Lorena Carvajal Arenas, Controller

Nelson Vásquez Lara, Vice Rector of Academics

Joel Saavedra Alvear, Vice Rector of Research and Graduate Studies

Arturo Chicano Jiménez, Vice Rector of Development

Alex Paz Becerra, Director General of Economic and Administrative Matters

Karina Toledo Cabezón, Director General of Public Relations

### **DEANS**

Juan Eugenio Álvaro Martínez-Carrasco, Faculty of Agronomy and Food Sciences

David Luza Cornejo, Faculty of Architecture and Urban Design

Manuel Bravo Mercado, Faculty of Sciences

María Teresa Blanco Lobos, Faculty of Economic and Administrative Sciences

María Graciela Brantt Zumarán, Faculty of Law

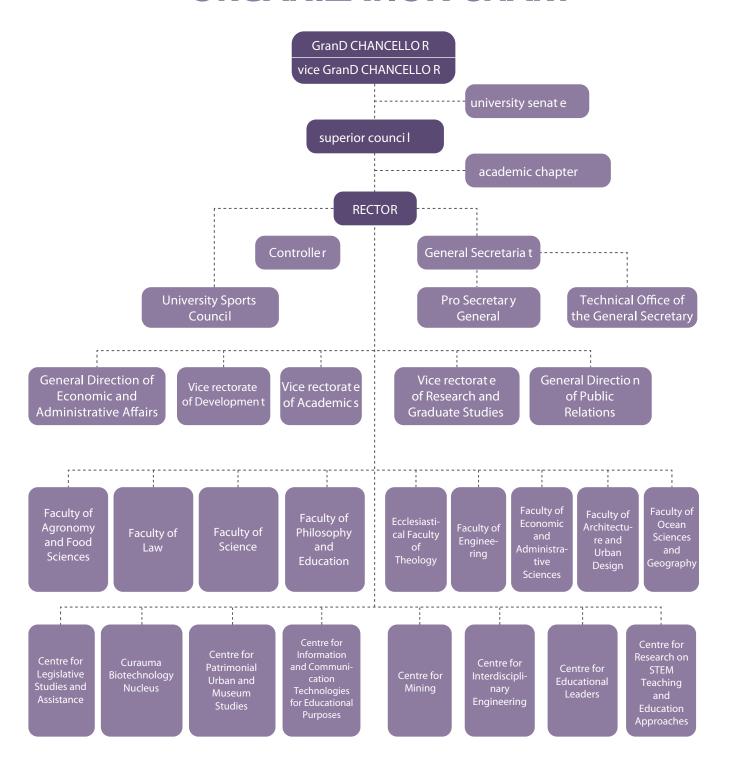
José Marín Riveros, Faculty of Philosophy and Education

Jorge Mendoza Baeza, Faculty of Engineering

Guillermo Martínez González, Faculty of Ocean Science and Geography

Gonzalo Bravo Álvarez, Ecclesiastical Faculty of Theology

### **ORGANIZATION CHART**



## INTEGRITY AND ETICAL BEHAVIOUR

Throughout its history, the Institution has made steady progress in the development of policies and mechanisms that are indispensable for strengthening the rectitude and ethical conduct of the members of the university community.

These mechanisms include the Internal Regulations on Order, Hygiene and Safety, which establish the principles that govern staff in terms of ethical conduct, as well as the associated rights, obligations and sanctions. The following are the relevant bodies and instruments that the University has in place to guarantee integrity and ethical behaviour in its university community.





### **ACTIONS AGAINST**

### ABUSE, HARRASSMENT, VIOLENCE AND DISCRIMINATION

The University has a Commission for the Prevention and Monitoring of Abuse, Harassment, Violence and Arbitrary Discrimination, and a regulation on this matter, which has made it possible to address these reprehensible behaviours, which violate institutional values.

During the period, these rules, which govern relations between the different members of the university community, underwent a major reform that made it possible to resolve critical issues detected in the first two years of operation. This has made it possible, among other things, to speed up processing times, establish uniform criteria for the resolution of cases and make procedural progress.

In 2020, a total of 28 complaints were received, of which 19 were lodged by women and nine by men. Of the total, 25 were complaints lodged by students and three by academics (against another academic).

Seven cases were referred to mediation, two of which reached a satisfactory agreement. Notwithstanding the fact that in almost 80% of the cases the parties sat down to talk and tried to resolve their problem.

During the period, training workshops for sanctioned students were implemented as a measure to prevent the recurrence of gender-based violence behaviour by young people.



### CRIME PREVENTION MODEL

In order to ensure the continuous improvement of its standards of integrity, accountability and transparency, in 2018 it began the process of implementing the Crime Prevention Model for compliance with Law No. 20.393 on Criminal Liability of Legal Entities for crimes such as money laundering, financing of terrorism, bribery, receiving, incompatible negotiation, misappropriation and contamination of roles, among others.

In this way, a model has been organised to prevent incompatible negotiation, misappropriation, contamination, infringement of employment protection regulations and sanitary measures decreed by the authorities, among other offences.

As a complement to the prevention of possible criminal liability, a mechanism has been developed for managing and reacting to conduct that constitutes internal fraud, whereby the University may suffer damages in the event of misleading or irregular conduct by any of its employees, who thereby obtain undue benefits.

The implementation of these preventive systems contemplates a structured set of organisational elements, definition of policies, approval of manuals, designation of responsible professionals, implementation of programmes and procedures aimed at avoiding the verification of behaviours that could compromise the responsibility of the University or cause damage and help to determine how to act in case of detecting facts of this nature.

In addition, progress has been made in the implementation of the Conflict of Interest Policy and Procedure, with the submission of declarations of interest by all new authorities.





### STRENGTHENING SUSTAINABILITY MANAGEMENT

In 2020, the General Direction of Public Relations started the project "Strengthening sustainability management through the development of institutional capacities and their application in impact initiatives in the city of Valparaíso", awarded by the Ministry of Education.

The aims of this project are to: consolidate and articulate initiatives on this topic in the University; strengthen training activities in sustainability, both for students, academics and staff; promote sustainable campus management; and develop mutually beneficial initiatives with social organisations in the city of Valparaíso.

During the first year of the initiative's implementation, the Sustainability Commission was set up, made up of representatives from different vice-rectors' offices and general directorates, as well as academics with recognised experience in this field. In this way, the aim is to guarantee the crosscutting incorporation of sustainability in institutional work.

This led to the creation of a campus management sub-committee, which made progress in the development of environmental standards and protocols, as well as concrete actions to improve the operation of campuses and premises. A social action programme was also formalised, in alliance with social organisations in Valparaíso, which expanded opportunities for students to apply their knowledge and develop projects that contribute to the wellbeing and quality of life of the community.

### **MILESTONES**

Guided by its mission, the University has consistently built a track record of commitment to sustainability, including the following milestones:

- Adhesion to the "Universidad Construye País" (University Builds Country) project, whose objective was to expand the concept and practice of social responsibility in the Chilean university system.
- Participation in the MECESUP project "Training of professionals with values and attitudes and behaviour that favour the exercise of their Social Responsibility".
- Participation in the MECESUP project "Implementing an educational model to educate on Social Responsibility".
- Publication of the first Sustainability Report, which has been published over the last 11 years, being the only university in the country to carry out this exercise of transparency and accountability on an uninterrupted basis.
- 2013: Signing of the Sustainable Campus Clean Production Agreement.
- Adhesion to the Sustainable Campus Network, which brings together 26 higher education institutions in the country.
- Publication of the Sustainability Policy and creation of the University Social Responsibility Network of the Organisation of Catholic Universities of Latin America and the Caribbean (ODUCAL).
- 2016: Incorporation into the United Nations Global Compact Network Chile, committing to comply with its ten principles and to mobilise its contribution to the 17 Sustainable Development Goals.
- 2017: Incorporation in the Regional Observatory of Social Responsibility for Latin America and the Caribbean (ORSALC).
  - 2018: Creation of the Inclusion and Gender Unit.
- Awarded the Regional MINEDUC Higher Education Performance Agreement "Strengthening sustainability management through the development of institutional capacities and their implementation in impact initiatives in the city of Valparaiso", whose implementation began in 2020.

Awarding of the MINEDUC Regional Higher Education Performance Agreement "Creation of the PUCV Climate Action Centre for the development of applied research in climate adaptation at regional and national level". During that year, the Sustainability Commission was also constituted.

## ADHESION TO SUSTAINABILITY INICIATIVES

The University has established partnerships with global and regional initiatives that seek to promote sustainability and social responsibility.



### UNITED NATIONS GLOBAL COMPACT

The University is part of the United Nations Global Compact Network Chile, a global initiative that encourages organisations to adopt ten universal principles and mobilise their contribution to the 17 Sustainable Development Goals of the UN's 2030 Agenda.

Through this Sustainability Report, the University reports on its progress in integrating the principles of human rights, labour relations, the environment and anti-corruption; it is a means of compliance with the Communication on Progress and an instrument of transparency and accountability for institutional development.



### SUSTAINABLE CAMPUS **NETWORK**

In the last three years, the University has actively participated in the Sustainable Campus Network, being part of the Board of Directors of the Corporation and representative of the Valparaiso Region. In this role, it has played a fundamental role in promoting activities that benefit the institutions and professional partners that make up the network, promoting the implementation and continuous improvement of the RESIES evaluation tool (Report and Evaluation of Sustainability in Higher Education Institutions).

The Network enables the strengthening of alliances with other participating institutions, providing spaces for collaboration in training, campus management and public relations. Since its creation, it has established collaborative agreements with the Agency for Sustainability and Climate Change to carry out dissemination and training activities.

In 2020, negotiations began with the Ministry of Environment to implement a second Sustainable Campus Clean Production Agreement in Higher Education Institutions, to be signed in 2021.

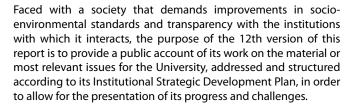


### UNIVERSITY SOCIAL RESPONSIBILITY NETWORK OF THE ORGANIZATION OF CATHOLIC

### UNIVERSITIES OF LATIN AMERICA AND THE CARIBBEAN (ODUCAL)

The purpose of this network is to contribute to the progress of Catholic higher education in Latin America. During 2020, together with the PUCV and other higher education institutions, the project "Resignification of Social Responsibility" was launched, which aims to give new meaning to university social responsibility in today's Chile, based on the project "University Builds Country" (2000-2007), which sought to support a higher education system in the new democracy, after years of little dialogue between institutions during the dictatorship.

## TRANSPARENCY AND ACCOUNTABILITY



The management of these areas, which form part of the economic, social and environmental context, is what enables the sustainability of the University. Based on the aforementioned materiality, the following strategic guidelines constitute the heart of its purpose and work between 2017 and 2022: "University that projects its identity", "University that generates knowledge", "University that trains people with a vocation to serve society", "University of quality and sustainability" and "University that connects".

The University explicitly declares sustainability in the fourth strategic guideline, without exception that this approach is present in all the guidelines, responding to the commitment to guide the Institution's performance under this perspective.

The PUCV's Sustainability Report communicates to all its stakeholders, relevant aspects between 1 January and 31 December 2020, covering the management at a central level as well as in its faculties, academic units and their various centres. It is based on the globally recognized methodology of the Global Reporting Initiative (GRI) Standards, in concordance with the core option.

The report is the result of a process of background information gathering that considered requests for information validated by the different areas of the University, allowing for a diagnosis of the progress achieved. Likewise, and in relation to the Institutional Self-Assessment process, relevant information was obtained as a result of "Pensemos PUCV" (Thinking PUCV), an instance that contemplates the collection of opinions from different members of the university community, as well as from external audiences.

The result of this process constitutes a valuable management tool for the monitoring, evaluation and comparability of the initiatives undertaken, offering an institutional learning perspective for the determination of present and future challenges.



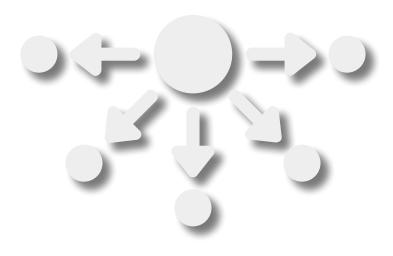
### STAKEHOLDER **ENGAGEMENT**

Through its various communication channels, participation and monitoring of its stakeholders, the University encourages constant and permanent dialogue with each of them.

The groups are made up of the university community (directors, academics, students, administrative staff and alumni), the educational system, the productive sector, the State and its institutions, as well as civil society, social and cultural organisations.

This Sustainability Report represents one of the selective communication channels used by the University to respond to the most relevant concerns of these groups, according to data collected in its strategic planning processes and instances of permanent dialogue.

The main channels of communication and stakeholder engagement are presented below.

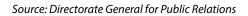


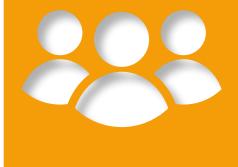
### **STAKEHOLDERS**

STAKEHOLDERS	INFORMATION CHANNELS	ENGAGEMENT MECHANISMS
Directives	Sustainability Report Website www.pucv.cl Intranet Notice Boards PUCV Magazine Emails Letters and/or invitations Memos and/or circulars Social networks Newsletters	University Senate Accreditation Process Online events
Academics	Sustainability Report Website www.pucv.cl Intranet Notice Boards PUCV Magazine Emails Letters and/or invitations Memos and/or circulars Social networks Newsletters	Superior Council Faculty Council Academic Unit Councils University Senate Accreditation Process Election of the Rector Election of the Deans Election of the Academic Unit Directors Association of Academics Online events
Students	Sustainability Report Website www.pucv.cl Notice Boards PUCV Magazine Emails Letters and/or invitations Social networks Newsletters	Faculty Council School Council University Senate Student Federation Student Centre Accreditation process Satisfaction survey Evaluation of Academics Voluntary organizations Online events
Administration and Service Staff	Sustainability Report Website www.pucv.cl Intranet Notice Boards PUCV Magazine Emails Letters and/or invitations Memos and/or circulars Social networks Newsletters	Workers Unions Joint Committees University Senate Accreditation Process Transmissions via streaming Performance Evaluation Psychosocial Risk Survey



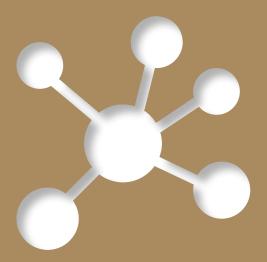
STAKEHOLDERS	INFORMATION CHANNELS	ENGAGEMENT MECHANISMS
Productive Sector	Sustainability Report Website www.pucv.cl PUCV Magazine Emails Letters and/or invitations Social networks Brochures Press releases and publications	Accreditation Process Employer Satisfaction Surveys Meetings Seminars and talks Provision of services Applied research activities Technical assistance, training, agreements Online events
Educational system	Sustainability Report Website www.pucv.cl PUCV Magazine Emails Letters and/or invitations Social networks Brochures Press releases and publications Newsletters Mailings	Educational Fairs Virtual talks School visits to the PUCV National & Regional Council of Rectors of Chilean Universities (CRUCH) Online events Periodic meetings Webpage form
Public Institutions	Sustainability Report Website www.pucv.cl PUCV Magazine Emails Letters and/or invitations Social networks Brochures Press releases and publications	Accreditation process Surveys of employer satisfaction Meetings Seminars Provision of services Applied research activities Online events
Social and Cultural Organizations	Sustainability Report Website www.pucv.cl PUCV Magazine Emails Letters and/or invitations Social networks Brochures Press releases and publications	Meetings Seminars and talks Access to campuses and use of infrastructure (Cineteca, Curauma library) Online events
Alumni	Alumni newsletter Sustainability Report Website www.pucv.cl PUCV Magazine Emails Letters and/or invitations Social networks Brochures Press releases and publications	Accreditation process Seminars and talks Technical assistance, training and conventions Employer Satisfaction Surveys Online events











## STRATEGIC **GUIDELINES**

### UNIVERSITY THAT **PROJECTS IDENTITY**

The first guideline of the plan corresponds to the **University projecting its identity**, understanding that this inspires all institutional work and is determined by its status as a Catholic university, of excellence and with a public vocation.

**Objectives:** to strengthen institutional identity in the university community and increase institutional presence in relevant issues of society, based on its identity.

### UNIVERSITY THAT GENERATES KNOWLEDGE

The second guideline of the plan is the **University that generates knowledge**, bearing in mind that it is a permanent challenge for the Institution to increase its capacity to create, apply and communicate knowledge.

**Objectives:** to increase the productivity and impact of research and creation, to encourage interdisciplinary research, to consolidate doctoral programmes and their international projection, and to strengthen the link between research and innovation, technology transfer and entrepreneurship.

### UNIVERSITY THAT SHAPES PEOPLE WITH A VOCATION OF SERVICE TO SOCIETY

The third guideline is a **University that trains people with a vocation of service to society**, reaffirming this commitment, present since its origins, but in a renewed way.

**Objectives:** to evaluate and update the institutional educational model, to promote the renewal of academic processes and structures, and to ensure a relevant and distinctive academic offer.

### QUALITY AND SUSTAINABLE UNIVERSITY

The fourth guideline corresponds to a **Quality and Sustainable University**, which highlights the institutional commitment to caring for people and the environment, the assurance of quality and the management and responsible use of resources.

**Objectives:** strengthen the development of the academic body, promote the continuous improvement of institutional processes and improve the management of financial, physical and information technology resources.

### UNIVERSITY THAT CONNECTS

he fifth guideline corresponds to a **University that connects** and as such is called upon to strengthen reciprocal enrichment with society.

**Objective:** to deepen the relevance of the University in society





## STRENGTHENING INSTITUTIONAL IDENTITY

By virtue of the identity that inspires all its work, the University has sought to strengthen and promote the contribution of its academic units in the construction of proposals to face the current challenges of the country and the world.

Through the agreements and commitments that they assume in relation to the Institutional Strategic Development Plan, evidenced in their respective Concordance Plans, concrete actions are carried out that show the University's identity. In this way, each academic unit undertakes to develop "Projects with public recognition", through which it places its distinctive skills at the service of society; and to strengthen the "Presence of academics in society", through participation as an evaluator, commissioner or member of networks, demonstrating their social commitment.

During the period, 71 projects were publicly recognised, and 753 academics were present in society thanks to the contribution they make to knowledge in their area of expertise, which made the Institution's commitment to society tangible.

#### **Chair of Institutional Identity**

With the aim of deepening the principles of the identity of the University and in the context of the Chair of Institutional Identity, the online seminar "The Identity of the PUCV 30 years after Ex Corde Ecclesiae" (From the Heart of the Church) was held in 2020. This Apostolic Constitution made by Pope John Paul II highlighted the concrete contribution that Catholic universities make to the integral development of the human being. The meeting was attended by the Apostolic Nuncio to Chile, Monsignor Alberto Ortega; the Pro Grand Chancellor and Apostolic Administrator of the Diocese of Valparaiso, Monsignor Pedro Ossandón; as well as academics from the University.

### HIGHLIGHTED PROJECTS

The following are publicly recognised projects implemented during 2020 that represent a concrete contribution to Sustainable Development.



The Pedagogical Mentoring Programme of the Institute of History is a collaborative project between the Initial Teacher Training Unit, UNESCO and the Ministry of Education, which seeks to redefine education and promote the educational continuity of students who come from Family Residences of the National Service for Minors (SENAME) in the Valparaíso Region.



In its fifth version and proactively responding to a national need due to the health situation, the Institute of Statistics modified the modality in which it delivered the Pre-Statistics School, a pre-university course for high school students, delivering its first online version. Its objective is to support students in solving, through statistics, problems related to the topic "Data and Chance" of the Transition Mathematics Test. The activity was offered free of charge to eleventh and twelfth grade students from any educational establishment in all regions of the country.

Investigating burnout and psychosocial risks at work to build a guide for mental health care at work in SENAME psychosocial programmes - School of Psychology (SDG 3 Health and Wellbeing)

The project aims to determine the prevalence and incidence of burnout and psychosocial risks at work in professionals subcontracted by SENAME in the context of a pandemic and to articulate a national guide for mental health care at work based on the data collected.

Integrated water resources management system for family farming in the Tarapacá Region
- School of Biochemical Engineering (SDG 6 Clean water and sanitation)

The objective of this project is to implement in the Tarapacá Region an integrated water resources management system that favours the transition towards sustainable agriculture at the level of family farming, under the principles of a circular economy.

FIC Logistics Network I+E Project - School of Construction Engineering (SDG 12 Responsible Production and Consumption)

Initiative funded by the Regional Government of Valparaiso, the Regional Council of Valparaiso (CORE) and the Regional Innovation Strategy (ERI), seeks to articulate the main actors of community recycling, with the aim of collecting recycled material starting with the separation at source.

### **ACADEMIC'S PRESENCE IN SOCIETY**

As evidence of the commitment of PUCV academics to sustainable development, the contribution they make through their participation in different public and private bodies stands out. These include the National Council for Urban Development, in the Risks and Climate Change working group; the UNITWIN international working network, under the auspices of UNESCO on Gender, Media and New Technologies; the Water Resources Specialist Network of the Council of Deans of the Faculties of Agronomy of the CRUCH; among others.

In 2020, a total of 753 academics and researchers participated in networks, working groups or commissions, contributing to society with their knowledge from their different areas of expertise.









The University is part of various inter-university networks, aware of the value of virtuous alliances for the achievement of common goals. It has been an active member of the Council of Rectors of Chilean Universities (CRUCH) since its inception.

- Council of Rectors of the Chilean Universities (CRUCH)
- Network of Public, Non-State Universities (G9)
  - Council of Rectors in Valparaíso (CRUV)
  - Group of Chilean Regional Universities (AUR)
  - University Centre of Development (CINDA)
  - Organization of Catholic Universities in Latin America and the Caribbean (ODUCAL)
- International Federation of Catholic Universities (IFCU)
- UNIVERSIA
- Sustainable Campus Network (RCS)
- STEAM Network, Valparaiso Territory
- Mediation Network Chile
- Telescopi Network





## COMMITMENT WITH THE SCHOOL SYSTEM

From its identity and as a teacher training institution, the Pontifical Catholic University of Valparaíso assumes its commitment to quality, equitable and sustainable education, contributing through its skills and knowledge.

#### TEACHERS FOR CHILE: VISION AND A SENSE OF MISSION

As a teacher training institution committed to the development of the country, the University is executing the "Implementation Plan for the Strengthening of Initial Teacher Training at the Pontificia Universidad Católica de Valparaíso".

The project, financed by the Ministry of Education and whose execution concludes in 2021, seeks to strengthen the professional development of both teachers in training and teacher trainers, in accordance with the needs of the school system and the current definitions of public policies.

Within the framework of this project, in 2020, the first Diploma Course on Induction to School Culture was carried out, whose objective is to follow up and support graduates of all PUCV's pedagogy degrees until their fourth year of graduation, with the participation of 60 students.

# EDUCATIONAL LEADERS - LEADERSHIP CENTRE FOR SCHOOL IMPROVEMENT

The PUCV Educational Leadership Centre, created through an agreement between the Ministry of Education (Mineduc) and the PUCV, among other universities, has as its mission, from an interdisciplinary perspective, to support the strengthening of the quality of the school system, through the training of people, research, development and innovation in educational leadership, within the framework of the institutional public vocation.

In order to continue contributing to quality education, in August 2020 the Centre signed a new agreement with Mineduc for the period 2020-2024, leading a new consortium together with the University of Chile, University of Magallanes, University Diego Portales and the Arauco Educational Foundation.

During the period, the Centre developed 12 projects with institutions such as CPEIP, JUNJI, SLEP Costa Araucanía, SLEP Puerto Cordillera DEP, La Ligua Municipality and SUMMA. In addition, it contributed to the Mineduc's policy of strengthening school leadership through professional development programmes in which 1,099 people from the 16 regions of the country participated.

Resources, documents and tools were made available through the Centre's website, with a special section for school leadership in times of health emergencies. In total, there were more than 300,000 visits and 38,406 downloads of resources.

In addition, 15 public webinars were organised, with the participation of 4,334 people connected simultaneously during the live broadcast.

## COSTADIGITAL CENTRE PUCV

The Costadigital Centre PUCV, since 1995, has contributed to improving the quality of education, integrating educational informatics into the school system. It focuses on continuous teacher training, as well as the design of pedagogical solutions, research and technical assistance for different educational levels.

Faced with the challenge of continuing the educational process in the context of the pandemic, during 2020 the Centre held the first virtual cycle of "Seminars to address distance education", with the participation of education professionals from all over the country, providing a space for reflection and support for more than 900 participants.

Also noteworthy is the support provided to MINEDUC in the area of continuing teacher training, in conjunction with the Centre for Pedagogical Improvement, Experimentation and Research (CPEIP). A total of 25 in-service training courses for education professionals were held, with a total of more than 1,450 certified participants nationwide.

Other projects include collaboration in the implementation of the "Sumo Primero en Terreno" Program, in conjunction with the School of Education and the Directorate of Institutional Projects, benefiting 198 schools, 695 directors and 941 teachers; "MICA LATAM: Climate Change Map", led by the Institute of Geography; collaboration in the construction of the document "Technical Guidelines for Maker and STEM classrooms"; and finally, the publication of the second catalogue of Drone Use in Education, which presents 20 pedagogical initiatives for the integration of drones in different areas and levels of the education system.

# RESEARCH CENTRE FOR INCLUSIVE EDUCATION (EDUINCLUSIVA)

The purpose of the Centre is to work towards an inclusive and quality education in Chile through cutting-edge research, training of specialised human capital and improvement of educational policies and practices.

It is funded by ANID, as it corresponds to an award from the National Competition for Education Research Centres of the Associative Research Programme. The centre is run by the School of Psychology and the School of Pedagogy of the PUCV, which carry out their work in alliance with the University of Chile, the Andrés Bello University, the University of Tarapacá and the Technological University of Chile, INACAP.

In 2020 and before the pandemic broke out, the Centre developed the third version of the Eduinclusive Summer School: "Accountability policies in education and their effects", while the third version of the Eduinclusive Winter School: "Inclusive education in emergency contexts", was carried out in digital format, with the objective of developing methodological and analytical capacities in educational communities to face emergency situations from an inclusive approach.



## STUDY **PROGRAMS**

The University has various instances and institutional study programmes that inform and raise awareness among citizens and influence the development of public policies on matters of social interest and those of the Institution itself.

## CENTRE FOR OCEAN LAW

With its more than 6,000 kilometres of coastline, Chile finds in the sea part of its origin and destiny as a country. For this reason, the Centre for Ocean Law, part of the Faculty of Law, participates in the legislative and public discussion on the global situation of the oceans, which have reflected the consequences of climate change and the vulnerability of ecosystems, underwater and terrestrial.

In 2020, Roció Parra, researcher at the Centre for Ocean Law and lecturer on the Law School's Diploma in Environmental Law, was invited to contribute to a reflection on the role of law in meeting the objectives that humanity has set itself, with a view to stabilising the planet's climate and, in particular, in identifying the legal reforms needed to achieve carbon neutrality by 2050.

## PROGRAM OF SOCIAL **STUDIES AND DEVELOPMENT (PRESODE)**

PRESODE, under the Faculty of Economic and Administrative Sciences, aims to promote the study, dissemination and applied research of social reality from a multidisciplinary perspective, with the aim of contributing to its better understanding. In this way, the program contributes to the diagnosis, design and measurement of public policy effects through studies and cultural cooperation initiatives.

## ASIA PACIFIC **PROGRAM**

The Program was established with the aim of contributing to a better sociocultural knowledge of the area, promoting the well-being of cultural relations and to address challenges in issues of relevance to both Latin America and Asia Pacific. In this way, the Program develops, projects and consolidates actions aimed at promoting academic exchange and cultural relations, stimulating the improvement of institutional performance, from a multidisciplinary and interdisciplinary approach to the treatment of topics of relevance to both Latin America and Asia Pacific.

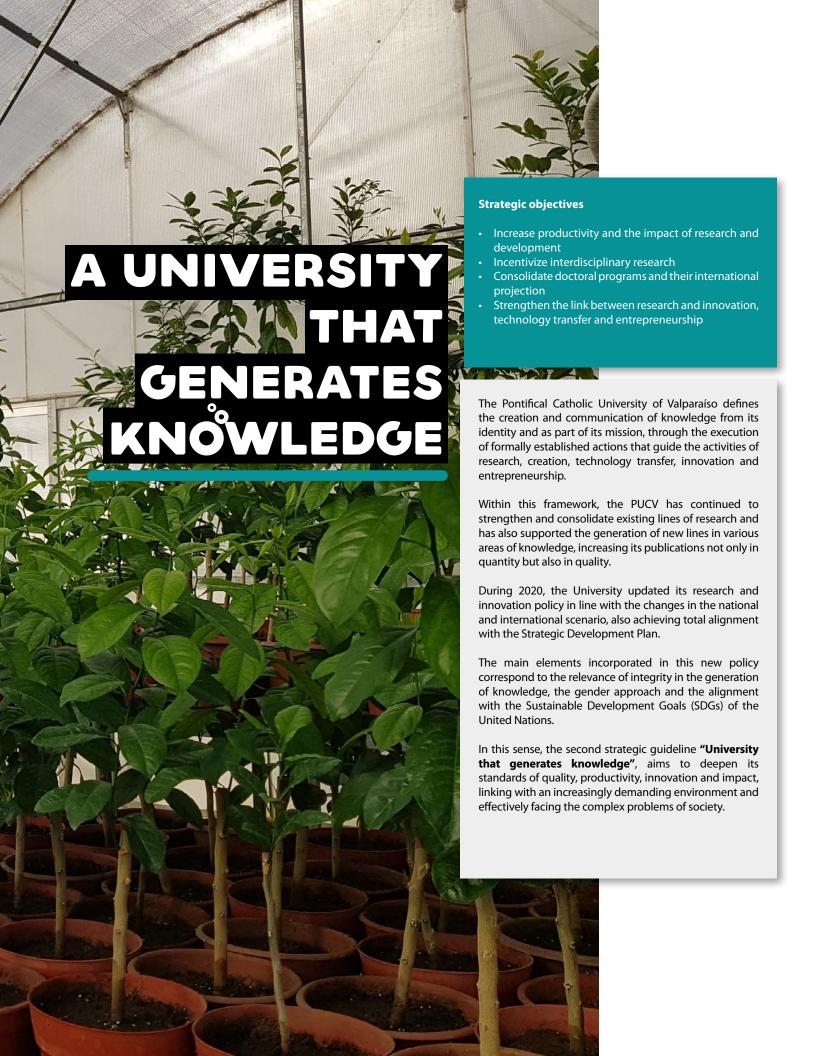
During 2020, the Asia Pacific Programme developed a series of virtual conferences to raise awareness of cultural aspects of the civilisations of China and India.

## FAMILY SCIENCE **PROGRAM**

The Programme, of the PUCV's Ecclesiastical Faculty of Theology, was created with the aim of reflecting, studying and contributing to the projection of the family, from a multidisciplinary perspective.

In 2020, the first Diploma in Sciences for the Family was held, which approaches the family from different theoretical and practical approaches in order to promote dialogue on this fundamental institution of humanity from a Christian perspective.







## SUPPORTING **RESEARCH**

The University, which has promoted and steadily increased its capacity to create, apply and communicate knowledge, understands that the role of research is key to achieving the Sustainable Development Goals, as it is a factor in accelerating economic development and a determining element in the construction of more sustainable societies.

As a result of the institutional maturity achieved in this field and given the high commitment of its researchers, academics and students, the University has reached a prominent position in the group of national and international research universities, evidence of the support that the Institution gives to its researchers through various instruments and programmes designed especially for them, which guarantee the disciplinary diversity of the research projects.

## EXTERNAL FOUNDED **PROJECTS**

In 2020, the University was awarded national and international external funding for a total of 63 projects. These figures have continued to position the PUCV among the best in Chile in the field of research. In this sense, the 46 Fondecyt projects awarded, place the University in first place at regional level and 6th at national level.

TYPE OF FUNDING			FINANCING (MILLION PESOS)	
THEOTIGINE	2019	2020	2019	2020
National funding (Fondecyt, ANID)	71	56	7.902	5.261
ANID International Cooperation Program, other international projects	21	7	396	17
Totals	92	63	8.297	5.278

Source: Department of Research, Vice-rectorate of Graduate Studies and Research.

There was a decrease in the number of projects with international funding compared to the previous year, due to the pandemic context that led to the suspension or closure of the main international funding competitions, both from ANID and other sources.

#### **PUCV Projects with ANID COVID-19 Funds**

A.

In July 2020, researchers, Claudia Mellado from the School of Journalism, and Jorge Olivares from the Institute of Biology, were awarded two ANID Scientific Research Funds COVID-19, aimed at generating scientific knowledge to improve the understanding of the causes and effects of the pandemic, in order to improve the processes related to the management of the health crisis caused by the virus. The projects were selected from among 1,056 proposals received nationwide.

The project led by Claudia Mellado seeks to identify the role of the media in health crisis situations and their potential impact on the health of the population, as well as on the decisions of authorities, the private sector and citizens. Meanwhile, the project led by Jorge Olivares aims to quantify the load of viral genomes in wastewater, which are a reflection of the pathogens that are circulating in the population, in order to implement a permanent surveillance system of the matrix.



Claudia Mellado



Jorge Olivares

#### INTERNALLY **FOUNDED PROJECTS**

The University has installed and consolidated research capacities thanks to different support instruments for the formulation, development and management of different types of projects; acquisition, maintenance and repair of scientific equipment; and support and incentives for the development of publications, works of artistic creation, books and book chapters, among others.

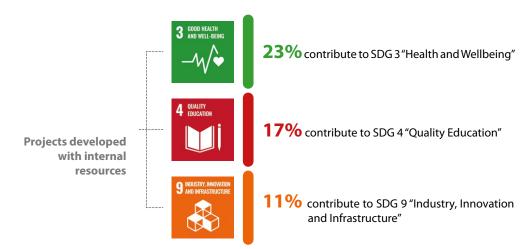
These support instruments are characterised by the fact that they incorporate most of the lines of research that are cultivated at the University and include academics, undergraduate and postgraduate students and other researchers, ranging from emerging lines of research to the most consolidated ones. Internal research competitions are highly valued by both academics and students, because they allow them to advance their development as researchers.

In 2020, a total of 234 projects were financed by the PUCV with its own funds, representing a total of \$600,264,530. Of these projects, 97 were promoted through internal competition and 137 through direct allocation and complementary support funds.

COMPETITION LINE	2019	2020
Consolidated	25	15
Emerging	31	21
Value Seal / Institutional Identity	7	6
Innovative interdisciplinary research	6	0
Post doctorate	13	12*
Artistic Creation	8	6
Undergraduate research	6	0
Research nodes with PUCV funds	9	0
Research in times of Covid-19	0	6
Transfer in undergraduate research	0	8
Interdisciplinary Undergraduate Research	0	17
FUTUREPACIFIC Internacional PUCV -AUT Projects	0	6
Total	105	97

\*Continuation of Internal Research Post-doctorates Source: Department of Research, Vice-rectorate of Graduate Studies and Research

From 2020 onwards, the projects have been linked to the Sustainable Development Goals (SDGs)which each support, in order to quantify the institutional contribution to these goals.



## INTERDISCIPLINARITY IN **PANDEMIC TIMES**

Prior to the Covid-19 pandemic, the scientific world was moving steadily towards new models of collaborative research, a process that accelerated with the advent of the health crisis. This new scenario has generated pressures and new challenges which, bearing in mind the enormous and complex difficulties involved, have led to a scaling up of research work towards alternative forms of collaboration between different disciplines.

In this respect, the University once again opted for innovative interdisciplinary research projects, which have unique characteristics by promoting the development of highly challenging and novel ideas in which neither the feasibility of the project nor the curriculum of the researchers is evaluated. International collaboration projects were also implemented with the Auckland University of Technology (New Zealand) for research and development with the participation of academics and students.

## PUCV RESEARCG NODES: HIGH IMPACT KNOWLEDGE SERVING SOCIETY

With direct contribution to SDG 17 "Partnerships to achieve the goals", the PUCV has promoted the creation of Research Nodes, which are interdisciplinary groups aimed at generating high-level scientific and/or technological research with national and international impact.

#### **SOCIAL SCIENCES AND HUMANITIES NODE**

Research Node on Accessibility and Inclusion Studies
Data Analytics Research Node
Research Node on Language, Learning and Pedagogical Practices

#### SCIENCE AND TECHNOLOGY NODE

Research Node on Naturally Based Solutions for Emerging Environmental Challenges Electromobility Research Node
Climate Change and Protected Agriculture Research Node
Smart Telecommunications Research Node
Lithium Science and Technology Research Node
Teacher Training Research Node



## DIFFUSION AND KNOWLEDGE **SHARING**

As part of its commitment to the generation and dissemination of new knowledge, the PUCV encourages publication in indexed journals and digital libraries.

In this regard, dissemination through Web of Science (WOS) publications recorded an increase of 23% over the previous year, rising from 712 in 2019 to 875 publications in 2020.

It should be noted that 74,1% corresponded to publications in the Q1 and Q2 quartiles, i.e., in journals with the highest impact. There was also an increase in publications in the Scopus database, corresponding to 33%, compared to 2019.

In addition to publications in the above-mentioned journals, PUCV researchers disseminated their results by participating as authors or co-authors in 43 books and 148 book chapters during the reporting period.

#### **PUBLICATIONS IN INDEXED JOURNALS**

	2019	2020
Web of Science (WOS) Publications	712	875
Scopus Publications	828	1.104

Source: Department of Research, Vice-rectorate of Graduate Studies and Research



## NEW RESEARCH **PLATFORM**

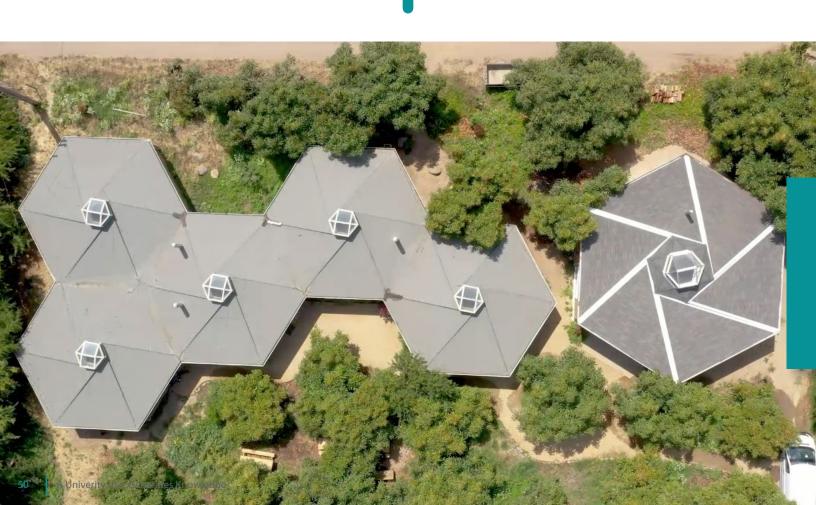
During 2020, the PUCV Research Portal was implemented, using the Pure platform, which is recognised as the world's leading research information management system.

This platform makes it possible to identify the contribution of researchers and their work to the Sustainable Development Goals, to boost the national and international visibility of research, to manage the productivity and profiles of academics, and to measure and monitor the scientific and social impact of the University's research.

The Pontifical Catholic University of Valparaíso was awarded the "Elsevier-Sustainable Development Award" by the scientific publisher Elsevier for the development of research in the category of Quality Education, corresponding to the fourth Sustainable Development Goal of the United Nations 2030 Agenda.

## RESEARCH **CENTRES**

The University has centres specialising in the generation of new knowledge, which, through collaborative, multidisciplinary work linked to the environment, contribute to responding to the major challenges facing society.



#### MAIN RESEARCH CENTRES AND THEIR CONTRIBUTION TO THE SDGS

4 QUALITY EBUCATION	Inclusiva Education Centre	Its purpose is to contribute to Chile having an inclusive and quality education, through cutting-edge research, training of specialized human capital and improvement of educational policies and practices. It is funded by ANID, as it corresponds to an award of the National Competition for Research Centres in Education of the Associative Research Program (PIA).
	Centre for Educational Leaders	Its objective is to develop innovative training, research and outreach programs to build responses to the problems that educational leaders identify in their efforts to improve the quality of education.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Regional Study Centre for Health Nutrition (CREAS)	The Centre is dedicated to the research and development of products and solutions for food processes together with entrepreneurs, companies and associations in the food industry.
	Regional Research and innovation centre for sustainability in agriculture and rural territories (CERES)	Its purpose is to conduct scientific, applied and interdisciplinary research to promote sustainable development models in agriculture and rural territories.
7 AFFORDABLE AND CLEAN ENERGY 13 ACTION	Curauma Biotechnology Nucleus (NBC)	Centre aimed at solving challenges in the area of biotechnology, promoting the development of clean technologies, bioprocesses, energy aspects and mitigation of greenhouse gases, through various scientific research projects, in conjunction with the public and private sectors.

Source: Department of Research, Vice-rectorate of Graduate Studies and Research

#### **AGRI-FOOD STRATEGY FOR QUILLOTA**

In 2020, the Ceres Centre began the implementation of the project "Participatory development of a Local Agrifood Strategy (EAL): building action networks for quality and sustainable food in the Quillota Valley", awarded in the VI Contest for the Strengthening and Development of Regional Centres for Scientific and Technological Development, carried out by the National Agency for Research and Development (ANID). Its objective is to strengthen the sustainability of agriculture and rural landscapes in the Quillota Valley, with territorial relevance and high community participation in its implementation process.



### INNOVATION AND HIGH SOCIAL IMPACT ENTREPRE-NEURSHIPS

The University has contributed to the development of an innovation and entrepreneurship ecosystem in the Valparaíso Region and in other regions of the country, through programs for the generation of innovative, high impact businesses. These proposals include not only science-based innovation and entrepreneurship, but also initiatives of a social nature, focused on strengthening micro-entrepreneurship and social innovation.

At the same time, progress has been made in consolidating a culture of innovation and entrepreneurship in the university community, through a series of support instruments aimed at academics, students, staff and alumni.

The Institution has several entities to fulfil these purposes, such as The Lift Preincubator, the GEN-E Social Incubator, the AlCubo School Incubator, the Chrysalis Business Incubator, the Valparaíso Maker Space Prototyping Laboratory, the Transfer and Licensing Office and the Centre for Entrepreneurship and Open Innovation - Ceinnova.

#### INTERNAL INNOVATION

#### AND ENTREPRENEURSHIP COMPETITIONS

The aim of these competitions is to encourage creativity and the identification of problems or opportunities, seeking to forge effective solutions for society from academics, students, staff and alumni.

During 2020, the virtual competitions were continued, including two new categories: Activate your Ingenuity and Environmental Challenge. In addition, a technical support plan was implemented, which included workshops, advice and mentoring on topics associated with business models, prototyping, intellectual protection and social impact, among others.

#### INNOVATION PROJECTS WITH INTERNAL FUNDING

	2019	2020
Total number of projects	28	58
Total funding	\$33.000.000	\$46.000.000

Source: Department of Innovation and Entrepreneurship, Vice-rectorate of Graduate Studies and Research.

These projects also contribute to the Sustainable Development Goals: 31% contribute to SDG 9"Industry, Innovation and Infrastructure", 10% to SDG 4"Quality Education", 10% to SDG 12"Responsible Consumption and Production" and 10% to SDG 13 "Climate Action".

#### **HIGHLIGHTED PROJECTS**



**KAPTAWA** Fog catcher: a sustainable solution for the ecological restoration of the coastal sclerophyllous forest of Quilpué. **Mechanical Engineering Students from the PUCV** 

SDG: 12 "Responsible Consumption and Production"

Target: Achieve sustainable management and efficient use of natural resources.

#### SDG: 6 "Clean water and sanitation"

Target: support and strengthen the participation of local communities in improving water and sanitation management.

Kaptawa seeks to develop technologies to contribute to climate change adaptation. It consists of the installation of a set of devices that capture the humidity in the air from the Mediterranean meteorological phenomenon called "coastal trough", which, between the Fourth and Eighth Regions, in predominantly summer periods, leaves light rainfall in the form of drizzle.



#### **GESTIÓN VERDE (GREEN MANAGEMENT) PUCV Industrial Engineering School Alumni SDG: 12 "Responsible Consumption and Production**

Target: Significantly reduce waste generation through prevention,

reduction, recycling and reuse activities.

Gestión Verde is dedicated to the integrated management of waste in the Valparaíso Region, offering a home recycling service and taking care of its revaluation. Considering the importance of educating the population, through its social networks the Gestión Verde team teaches, in a didactic way, new techniques of recycling, separation and reuse of waste.









## PROJECTS PROJECTS

An important contribution to society is made through externally funded innovation and entrepreneurship projects.

In 2020, the University was awarded a total of 18 projects in various calls for public funds, such as the FIA programme of the Ministry of Agriculture, the FIC-R programme of the Regional Governments and CORFO.

#### INNOVATION PROJECTS WITH INTERNAL FUNDING

	2019	2020
Total number of projects	61	18
Total funding	\$2.753.282	\$859.671

Source: Department of Innovation and Entrepreneurship, Vice-rectorate of Graduate Studies and Research

### INCUBATORS AND BUSINESSES

The University contributes to promoting an ecosystem to generate businesses that provide solutions to problems with regional, national and international scope. To this end, it has the Chrysalis Business Incubator, Cowork Atacama, Valparaíso Makerspace and Ceinnova.

In 2020, the creation of a Maker Network for the donation of personal protective equipment to local health centres throughout the country stands out, within the framework of the Innovation Challenges programme of the Ministry of Science, Technology, Knowledge and Innovation.

Another important milestone of the year was the realisation of the international event "Conecta Pacífico", in online format, with the participation of more than 60 prominent exhibitors from 11 countries and the attendance of more than 350 people, 57 ventures, 13 incubators, 10 private investors and 10 companies.

#### CHRYSALIS BUSINESS INCUBATOR

For 11 years, the Chrysalis Business Incubator has been supporting the creation of innovative companies based on research and technologies in various productive areas.

Committed to the economic and social development of the country and, above all, of its regions, Chrysalis has extended its operations to the regions of Atacama, Coquimbo and Maule.

In 2020, despite the pandemic, a series of initiatives were carried out, such as the launch of the first version of the "Zero" Incubation Programme in the Coquimbo and Maule regions; and the "Digitaliza Maule" project (Digitise Maule), which together with the companies PF Alimentos and Río Claro, supported entrepreneurs with technological solutions for the challenges faced by the industry.

Another highlight was the first INNOVAMATCH Business Roundtable, held in conjunction with Ceinnova, in which 13 large companies and more than 60 entrepreneurs took part and were able to access personalised meetings to present their projects and form alliances.

#### **CHRYSALIS BUSINESS INCUBATOR INDICATORS**

	2019	2020
Incubated entrepreneurships	71	72
Incubated entrepreneurships that undertake sales	37	22
Jobs created (incubated projects)	781	330
Companies or organizations (in Conviva)	5	10
Entrepreneurship promotional activities	668	554

Source: Department of Incubators and Businesses, Vice-rectorate of Graduate Studies and Research.

## COWORK

The Atacama Cowork, Chrysalis' headquarters in Copiapó, in 2020 focused the attention of entrepreneurs through digital platforms, which were also used for the development of training activities.

During that year, the venture "Yakka Energía", from the Cowork Atacama portfolio, won the national Avonni 2020 award in the regional category. This company has focused on developing environmentally friendly technologies to generate resources such as water and energy.

Another important milestone was the awarding of the FIC project "ConCiencia Lab Caldera", which with the support of the Faculty of Ocean Sciences and Geography and the CREAS Centre of the University, enabled the development of skills in students from the food processing speciality of the Manuel Blanco Encalada Secondary School for the development of innovative food prototypes.

#### **COWORK ATACAMA INDICATORS**

	2019	2020
Activities undertaken	112	61
Activity participants	1.906	1.276
Benefitted entrepreneurships	192	30
Benefitted organizations/companies	29	3
SMEs assisted	36	69

Source: Department of Incubators and Businesses, Vice-rectorate of Graduate Studies and Research.

VALPARAÍSO MAKERSPACE It is a formative and interdisciplinary space that offers instances of gradual and collaborative experimentation in the development of ideas and the construction of prototype projects, with the support of the Faculty of Engineering and its CORFO project 2030.

In 2020, an offer of services was generated aimed at boosting and increasing the probability of success in dynamic ventures (startups), through agile prototyping practices, thus enabling rapid and low-cost learning, exploring and validating hypotheses in their business models.



#### **VALPARAÍSO MAKERSPACE INDICATORS**

	2019	2020
Activities undertaken	83	92
Activity participants	2.652	880
Benefitted entrepreneurships	21	55
Benefitted organizations/companies	2	0
SMEs assisted	25	62
PUCV Students assisted	1.322	1.196

Source: Department of Incubators and Businesses, Vice-rectorate of Graduate Studies and Research.

#### **CIENNOVA**

The Centre for Entrepreneurship and Open Innovation (Ceinnova) is a space that seeks to promote new ways of producing and collaborating, aligned with the values of sustainability, from the needs of industries, companies and organisations to increase the competitiveness of the region and the country.

In 2020, health conditions highlighted the challenges in an uncertain context, positioning the development of companies' capacity to innovate as an urgent transformation. Similarly, the Ceinnova team generated a complete migration of its services to remote environments facilitating the installation of innovation capabilities in organisations.

#### **CEINNOVA INDICATORS**

	2019	2020
Activities undertaken	46	13
Activity participants	633	317
Benefitted companies	9	37
Benefitted entrepreneurships	43	162

Source: Department of Incubators and Businesses, Vice-rectorate of Graduate Studies and Research.

## BUSINESS **DEVELOPMENT CENTRES**

The PUCV collaborates with the SMEs served by the Business Centre, through activities, workshops and internships of students and academics from the Schools of Commercial Engineering, Food Engineering, Business, Psychology and Law, as well as the Transfer and Licensing Office, Valparaiso Makerspace, Curauma Biotechnology Nucleus, among other units.

Thanks to the operation of its Business Centres in Quillota and Aconcagua, the PUCV served 1,164 SMEs and entrepreneurs in 2020, deploying a broad territorial work in 22 municipalities in the provinces of Quillota, Petorca, Los Andes and San Felipe, decentralising the regional offer of support services, training and technical assistance of Sercotec in the Valparaíso Region.

#### **QUILLOTA BUSINESS CENTRE INDICATORS**

	2019	2020
Activities undertaken	265	243
Activity participants	3.746	729
SME and entrepreneurs supported	486	729

Source: Department of Incubators and Businesses, Vice-rectorate of Graduate Studies and Research.

#### **ACONCAGUA BUSINESS CENTRE INDICATORS**

	2019	2020
Activities undertaken	147	191
Activity participants	2.978	435
SME and entrepreneurs supported	436	435

Source: Department of Incubators and Businesses, Vice-rectorate of Graduate Studies and Research.

The Public Relations chapter deals with innovation and entrepreneurship programmes of a social nature, focused on strengthening micro-entrepreneurship and social innovation, as well as the work developed in the school system.







### UNDERGRA-DUATE STUDIES

Undergraduate education is the essential area and the fundamental basis of the University's work, which is reflected in a diverse and quality academic offer, in compliance with its institutional mission.

In 2020, in the 62 undergraduate programmes taught at the University, a total enrolment of 16,631 was recorded, representing an increase of 2,38% over the previous period, with 3,573 corresponding to first-year students.

The design of the programs, leading to an academic degree or professional title, covers various areas of knowledge such as the arts, humanities, engineering, basic sciences, education and theological studies, and is underpinned by the possibility for students to continue their education through each of the undergraduate and postgraduate stages.

During the period, the number of undergraduate graduates increased by 25,2%, which is the result of the multiple actions taken to ensure timely graduation.

#### **UNDERGRADUATE INDICATORS**

PERIODS	2019	2020
Undergraduate programs	62	62
Total undergraduate enrolment	16.214	16.631
First year undergraduate enrolment	3.888	3.573
Undergraduate PSU Average	602	593,7
Graduates	1.607	2.101
Students with financial support for undergraduate fees	85%	85%

Source: Academic Vice-rectorate.

## ACADEMIC **OFFERING**

In 2020, in its nine faculties, the PUCV offered 62 undergraduate programmes.

#### FACULTY OF AGRONOMY AND FOOD SCIENCES

Agronomy
Food Technology

#### FACULTY OF ARCHITECTURE AND URBAN DESIGN

Architecture Design Bachelor of Art

#### FACULTY OF SCIENCES

Bachelor of Science Biochemistry Statistical Engineering Kinesiology Bachelor of Biology Bachelor of Physics Bachelor of Mathematics

Pedagogy in Biology and Natural Sciences

Pedagogy in Physics
Pedagogy in Mathematics
Pedagogy in Chemistry and Natural Sciences
Industrial Chemistry
Medical Technology

### • FACULTY OF ECONOMIC AND ADMINISTRATIVE SCIENCES

Accounting & Auditing Commercial Engineering Journalism Social work

#### FACULTY OF LAW

Law

#### FACULTY OF PHILOSOPHY AND EDUCATION

Early Childhood Education English-Spanish Interpretation English-Spanish Translation Musical Interpretation

Bachelor's in musical sciences and Arts

Bachelor's in philosophy

Bachelor's in history with a mention in Political Sciences

Bachelors in Hispanic Language and Literature

Pedagogy in Spanish and Communication

Pedagogy in Basic Education

Pedagogy in Physical Education

Pedagogy in Philosophy

Pedagogy in History, Geography and Social Sciences

Pedagogy in English

Pedagogy in Music

Psychology

**Special Education** 

#### FACULTY OF ENGINEERING

Civil Engineering
Civil Biochemistry Engineering
Civil Mine Engineering
Civil Electric Engineering
Civil Electronic Engineering
Civil Metals Extraction Engineering
Civil Industrial Engineering
Civil Informatics Engineering
Civil Mechanical Engineering
Civil Chemical Engineering

Execution in Bioprocesses Engineering Execution in Informatics Engineering

Transport Engineering
Electrical Engineering
Electronic Engineering
Construction Engineering
Mechanical Engineering

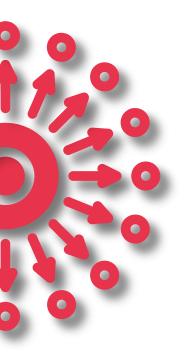
#### FACULTY OF OCEAN SCIENCES AND GEOGRAPHY

Geography Oceanography

#### **ECCLESIASTICAL FACULTY OF THEOLOGY**

Canonical Baccalaureate in Theology Bachelor's in religious sciences and Pastoral Studies Bachelor's Degree in Theological, Biblical studies and Ecumenical Dialogue

Source Academic Vice-rectorate.



### UNDER-GRADUATE MARKETING AND DIFUSION

The PUCV carries out a responsible, transparent and truthful dissemination of the application and enrolment process, as well as of its degree programs.

Due to the health crisis, outreach to school communities was conducted virtually, increasing the reach of participants.

In this context, new activities were created, such as the "Open Talks", broadcast via social networks. A total of 703 activities of this type were carried out, where the Institution and its undergraduate offer were presented, generating contacts with more than 5,800 applicants. In addition, the "Virtual Open Day", where prospective students had access to the undergraduate offering, benefits and student services, touring the University through a virtual platform.

The University was also present at virtual fairs and held a wide range of talks. All of this was accompanied by a digital marketing strategy and intensive use of social networks.

In 2020, a free preparation course for the Transitional Admission Test on Language and Mathematics was developed, in which more than 500 schoolchildren participated.



In fulfilment of its mission and public vocation, the University has endeavoured to ensure diversity in the admission of new students, seeking to maintain the heterogeneity that distinguishes it, and which is reflected in the socio-economic make-up of its student body.

In this sense, and in order to promote a fairer society and an equitable entry to higher education, the PUCV has proposed to open spaces for integration, seeking to provide opportunities for personal and academic growth to young people who show academic talent, high abilities or high academic performance, regardless of the context from which they come. It is under this premise that the BETA, PACE and Preparatory programs, belonging to the area of Inclusion of Academic Talent PUCV, under the Academic Vice Rector's Office, have arisen.

During 2020, the training activities of these programmes were carried out in virtual mode.







**BETA Program** 

#### **BETA** PROGRAM

With 15 years of experience, the BETA programme is positioned as the only regional instance that serves the wide age range of students with high intellectual ability, who study from 6th to 12th grade. Through workshops and courses, it seeks to enhance the cognitive skills of students and promote their overall development.

In recent years and with the aim of promoting inclusion and respect for diversity, the programme has put a special focus on the following groups: girls and adolescents, children of immigrants and students with double exceptionality.

#### N° OF STUDENTS BENEFITED IN EACH COMMUNE

COMMUNE	2019	2020
Valparaíso	94	78
Quilpué	47	45
Quillota	34	34
Casablanca	25	20
Quintero	29	30
Subvencionados - particulares	43	42
Total	272	266

Source: Beta Program, Vice-rectorate of Academics.

#### **PACE** PROGRAM

The Programme of Accompaniment and Effective Access to Higher Education (PACE), promoted by the Ministry of Education and implemented by the University for the sixth consecutive year, allows outstanding secondary school students to access higher education through activities in the different school communities, with a strong emphasis on the development of crosscutting skills for higher education.

Although the pandemic had a strong impact on the development of the Programme, given its eminently territorial nature, it was able to strategically link with 18 municipal educational establishments with a high vulnerability index in the Valparaíso Region.

#### PACE PROGRAM INDICATORS

	2019	2020
N° Educational Establishments	18	18
N° of students	1.838	1.950

Source: PACE Program, Vice-rectorate of Academics.

#### PREPARATORY PROGRAM

The PUCV Preparatory Programme seeks to increase and/or develop academic competencies and reaffirm the vocation of 12th grade students with high academic performance who wish to access higher education.

Its versions are the General Preparatory, the Pedagogy Preparatory and the Engineering Preparatory, whose formative actions consider homologation of subjects, support during the process, development of internships and special admission to the PUCV.

In 2020, 31 students entered the PUCV through the inclusive General Preparatory pathway, being their first choice of studies.

#### PREPARATORY PROGRAM GENERAL INDICATORS

	2019	2020
N° establishments	53	27
N° students selected	50	55
Nº PUCV enrolments	31	31
Percentage of student retention	94%	100%

Source: Preparatory Program, Vice-rectorate of Academics.

#### **Pedagogy Preparatory**

In 2020, the second version of the Propaedeutic Programme for the Initial Training of Teachers of Excellence PUCV was carried out, aimed at improving the undergraduate training processes for the development of teachers of excellence.

In that year, the first generation of Pedagogy Preparatory students enrolled at the University, who received effective accompaniment throughout the year from the Preparatory team and support through the tutoring system, as a way to strengthen their academic performance.

#### **TEACHING PREPARATORY INDICATORS**

	2019	2020
Nº of establishments	25	36
No of students evaluated	45	84
No of students selected	40	60
N° of PUCV entrants	19	35

FSource: Preparatory Program, Vice-rectorate of Academics.

#### **Engineering Preparatory**

The Engineering Preparatory Programme launched its first pilot version in August 2020, with the aim of increasing the academic skills and vocation of talented students with high academic performance who show interest in the area of engineering, offering effective access to higher education in the different specialisations offered by the University.

Due to the fact that the version had to be carried out virtually, the application process was open to all schools in the country, which allowed students from other regions to apply.

In the 2020 Admission Process, 42 students entered the PUCV through the inclusive Preparatory pathway. All of them entered their first option of studies.

#### **ENGINEERING PREPARATORY INDICATORS**

	2020
N° of establishments	45
N° of students evaluated	125
N° of students selected	70
Nº of PUCV entrants	42

Source: Preparatory Program, Vice-rectorate of Academics.

#### **GENDER EQUALITY PROGRAM**

The Gender Equality Program aims to incorporate the gender perspective in the various university spheres and strengthen the construction of equitable relations that prevent the violence that is exercised mainly against women and sexual and gender diversities.

During 2020, a climate of education and respect for different identities, sexual orientations and gender expressions continued to be strengthened in all institutional areas through guidance material, training and workshops aimed at the university community.

**ACTIONS AND ALLIANCES 2020** 

- Modifications to the procedure for the recognition of gender identity and use of a social name, drawing up an official document, generating a protocol for users, and a guide for the Academic Units. In addition, comprehensive support was provided to students in the process of recognising their social name.
- Campaign on the International Day for the Elimination of Violence Against Women, reinforcing the promotion of good treatment and rejection of gender-based violence.
- Training on "Cyber-bullying and gender perspective in the university world", together with the CRUV Gender Equality Commission.
- Workshop "Gender approach and prevention of violence", aimed at students, on topics such as introduction to gender theories and feminisms, sexual and gender diversity, masculinities and gender-based violence in a university context.
- Commemoration of International Women's Day through the recognition of 20 pioneering women at PUCV.
- Cycle of talks aimed at the university community on relevant gender issues in university work.
- Counselling sessions for male students sanctioned for cases of gender-based violence, , which aim to raise awareness of violence from a re-socialisation and re-education approach. The sessions are part of the sanction implemented by the university and are a requirement for resuming academic work.
- Work in collaboration with student groups such as "Mujeres Informáticas" from the School of Computer Engineering and "Chicas EIE" from the School of Electrical Engineering. In addition, the systematic work with the Commission for the Prevention and Monitoring of Abuse, Harassment, Violence and Arbitrary Discrimination, to raise awareness of gender equality and violence.



#### **MAKING PROGRESS ON SDG 5: GENDER EQUALITY**

The program's main lines of action include the promotion of gender equality and inclusion in the different university spaces, training with a gender perspective, the promotion of research and institutional studies on these matters, awareness raising and prevention of gender violence in its various forms, and links with higher education institutions.

#### **WSTEM PROJECT**

Led by the PUCV's School of Industrial Engineering, the WSTEM project aims to improve strategies and mechanisms for the attraction, access and mentoring of women in STEM (Science, Technology, Engineering and Mathematics) programmes in higher education. This programme is funded by Erasmus+ of the European Union and brings together 15 European and Latin American universities.



#### PUCV INCLUSIVA PROGRAM

The Program of Attention to Students with Disabilities, PUCV Inclusiva, aims to ensure equal access to knowledge and university life for all students with disabilities. Its areas of work include raising awareness in the educational community, teacher training, promoting universal access and strengthening the participation of students with disabilities in collaborative networks.

Due to the contingency, new student support needs were detected, such as connectivity scholarships, tablets, desk chairs, among others, which were covered by the University.

During 2020, 107 students were enrolled, of which 25 entered their first academic year. In addition, eight students graduated (four in each semester).

#### **N° OF ENROLLED STUDENTS WITH DISABILITIES**

TYPE OF DISABILITY	2019	2020
Sensory hearing	11	21
Sensory sight	6	7
Physical or motor	32	39
Mental cognitive	28	34
Mental psychiatric	3	5
Physical – Visual - TEA		1
Total	80	107

Source: Attention Program for Students with Disabilities, Academic Vice-Rectory.

# INITIAL SKILLS **DEVELOPMENT PROGRAM**

Following a process of diagnosis of the skills required by the graduation profile of first-year students, those with deficient skills are identified and a set of mechanisms are established to support their learning and effective integration into university life. This has contributed to a progressive increase in first-year retention rates.

The programmes carried out are presented below:

#### PUCV ACADEMIC **TUTORING PROGRAM**

The objective of the PUCV's Academic Tutoring program is to help students acquire and strengthen the academic skills necessary to perform adequately in the different subjects studied, as well as to strengthen the process of installation and effective integration into university life.

# PROGRAM TO STRENGTHEN BASIC SCIENCE SUBJECTS

Its purpose is to level the academic skills of undergraduate students enrolled in the subjects of mathematics, physics and chemistry, in order to improve their pass rates.

In both programs there is a progressive increase in pass rates. In 2020, an 87% pass rate was recorded in the academic tutoring programme, compared to 83% in the previous year.

#### N° OF STUDENTS IN INITIAL SKILLS DEVELOPMENT PROGRAMS

PROGRAM	2019	2020
Academic Tutoring Program	884	1.992
Program to strengthen science (PREMATE)	1.153	998
Program to strengthen science (PREFIS)	221	346
Program to strengthen science (PREQUIM)	67	484

Source: Directorate of Student Affairs, Vice rectorate of Academics.



# QUALITY AN N INTEGRAL EDUCATION

In fulfilment of its mission, the Pontifical Catholic University of Valparaíso seeks to train graduates and professionals with a vocation of service to society, providing a comprehensive, lifelong education of excellence, permanently linked to the surrounding environment.

In 2020, the University unveiled the update of its Educational Model, consisting of an ordered set of concepts, premises and decisions that guide the formation of people at the PUCV.

In this way, the University addresses the challenge of forming professionals for the 21st century, adapting the training of people to the demands of today's society.

GO TO EDUCATION MODEL

### FUNDAMENTAL **EDUCATION**

The University is committed to comprehensive training at all levels of education, which involves the development of value, academic and personal and interpersonal development skills, essential for performance in the academic and working world.

At undergraduate level, the Fundamental Training Programme aims, among other objectives, for students to act with ethical commitment and social responsibility, through the development of eight institutional skills, present in all the graduate profiles of the syllabuses. These skills are grouped into three areas: transcendent-valorical, academic and personal and interpersonal development.

Of the 70 subjects offered in the Fundamental Education Program in 2020, 27 of them promote learning that contributes to the advancement of the **Sustainable Development Goals (SDGs)**, strengthening values aimed at social well-being and environmental care.

#### **FUNDAMENTAL EDUCATION COURSES - ALIGNED TO THE SDG**



### FUNDAMENTAL EDUCATION COURSE

- Geography of poverty and social inequality
- Pension System a case study
- · Self-care and healthy living
- Health: Personal responsibility and social responsibility
- Foods, nutrition and health



- University and academic freedom in Chile
- Prosocial responsibility: a challenge for professional life
- Development of skills for labour market insertion
- Social responsibility in learning and service



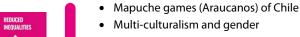
- Gender and feminism: history and modern debates
- Norms and gender
- Multiculturalism and gender



Labour insertion



- Great engineering works: past, present and future
- Innovation in my profession
- Innovation and social entrepreneurship
- Sustainability in engineering
- Creativity for entrepreneurship
- Leadership and personal entrepreneurship



- Human beings and the Common Good:
   Fundamentals of Social responsibility
- Introduction to sign language





FUNDAMENTAL EDUCATION COURSE

Source: Vice-rectorate of Academics.

#### **MINORS PUCV**

For the second consecutive year and after its implementation as a pilot plan in 2019, during the second semester of 2020 the PUCV started a new version of Minors PUCV, an undergraduate certificate that deepens and complements the academic training of students, under a specific thematic line.

During the period, the Minor Healthy Life and Human Wellbeing was added to the offer, which seeks to develop students' knowledge of health through a theoretical-practical experience centred on the integral being, coherent with personal health, that of their community and in connection with the environment.

In 2020, 147 students enrolled in the courses leading to a Minor, completing a total of 1,027 students enrolled in the two years of implementation.

#### **MINORS PUCV**

ARTS AND CULTURE
HISTORY, TERRITORY AND SOCIETY
INNOVATION AND ENTREPRENEURSHIP
PEOPLE AND SOCIETY FROM A CHRISTIAN VISION
HEALTH AND HUMAN WELFARE

### ENGLISH **PROGRAM**

The English as a Foreign Language Programme considers high international quality standards, framed in the descriptors of the Common Framework of Reference for Languages.

In order to address the set of oral and written communication English language skills necessary for professionals in the 21st century, in 2020 the program had a significant increase in both the number of courses offered and the total number of students benefited in relation to the previous period. However, as a consequence of the pandemic, there was a notable decrease in the number of students taking the English diagnostic test and in the number of certified students.

	2019	2020
English courses offered	185	238
Benefitted students	3.699	5.680
Students certified with an advanced level	203	70
Students that took the Cambridge English Placement Test	3.023	1.642

Source: English Program, Vice-rectorate of Academics.

## CONTINUOUS CURRICULUM IMPROVEMENT

In order to ensure the relevance, pertinence and flexibility of its curricula, the University is in a process of continuous review and improvement of its curricula.

In this context of continuous improvement, the following actions were carried out in 2020:

- Update of the Curriculum Design Guidelines for Undergraduate Degrees and Diplomas, which updates the previous 2015 Undergraduate Design Guidelines document. This update is made in the framework of the new version of the Educational Model.
- Creation of curricula in Civil Data Engineering, Civil Construction Engineering, Civil Telecommunications Engineering, Bioprocess Engineering and Business Management Engineering.
- 18 curriculum updates, considering 10 major changes and 8 minor changes.

## STUDENT **SUPPORT**

The University has a number of support mechanisms in place for students entering undergraduate programs to ensure their learning and well-being. It also has different types of scholarships and loans from its own and state funds.

# SUPPORTING STUDENTS FOR FEES AND SUBSISTENCE

These are benefits for the payment of the annual tuition fees, financed by the University or the State.

In 2020, 85 % of students received some kind of support or assistance for the payment of their fees, either in terms of free tuition, scholarships, exemptions and/or educational loans.

The Gratuity Benefit gave access to higher education to a total of 8,912 students, who belong to 60% of the country's low-income population. It should be noted that this State contribution favoured more than 50% of the University's students.

On the other hand, a total of 2.150 students accessed the University Credit Solidarity Fund, whose financing corresponds entirely to PUCV resources. The number of students was inferior in comparison to 2019

### **N° BENEFICIARIES – UNIVERSITY LOANS**

	2019	2020
University Solidarity Credit Fund	2.457	2.150
State Guarantee Loan	2.773	2.134

### N° BENEFICIARIES OF FEE SCHOLARSHIPS AND PRIZES - FINANCES BY THE PUCV

BENEFIT	2019	2020
PUCV Student Insurance	34	23
Rector Rubén Castro Prize	22	16
PUCV Scholarship	78	144
Isabel Caces de Brown Scholarship	102	89
Juan Fernández Scholarship	2	3
Rapa Nui Scholarship	3	2
Outstanding Admission Prize	294	281
PUCV Teacher Vocational Complementary Scholarship	831	725

Source: Directorate of Student Affairs, Vice rectorate of Academics.

#### N° BENEFICIARIES OF FEE SCHOLARSHIPS - FINANCED BY THE STATE

BENEFIT	2019	2020
Free Education Benefit	8.249	8.912
Bicentennial Scholarship	875	723
Children of Educational Professionals Scholarship	75	77
Valech Scholarship	24	28
Academic Excellence Scholarship	66	56
PSU Scholarship	1	1
Teacher Vocation Scholarship	831	722
Articulation Scholarship	4	2
Relocation Scholarship Universidad del Mar	1	0

Fuente: Dirección de Asuntos Estudiantiles, Vicerrectoría Académica.

### **N° OF BENEFICIARIES OF SUPPORT AND MAINTENANCE SCHOLARSHIPS**

TYPE OF SCHOLARSHIP	2019	2020
Parents PUCV	143	139
Food Scholarship	311	244
Residence Scholarship	438	397
Study Scholarship	277	214
President of the Republic Scholarship	621	629
Solidarity Bank Scholarship	27	25
JUNAEB Indigenous Scholarship	180	147
Sara Braun Scholarship	55	42
JUNAEB Maintenance Scholarship	10.125	10.625
JUNAEB Food Scholarship	71	50
JUNAEB Territorial Integration Scholarship	1.761	1.009
JUNAEB Teacher Vocation Maintenance Scholarship	60	30
UMAR Maintenance Scholarship	1	2
Indigenous Residency Scholarship	32	24
Polymetals	2	3
Patagonia Aysén Scholarship	93	89

Source: Directorate of Student Affairs, Vice rectorate of Academics.

# TECHNOLOGICAL SUPPORT FOR ONLINE LEARNING

Faced with the suspension of face-to-face classes as a result of the health crisis, and in order to ensure that no student's academic progress was affected, the University made significant efforts to help those who required support to access virtual classes.

In 2020, grants were awarded for equipment (mobile broadband and tablets), as well as cash grants for connectivity and the purchase of equipment, benefiting more than x students.

In order to facilitate the start of the university life for first year students, guided support was provided through the Virtual Classroom, aimed at showing the services offered by the University and the use of the technological tools available to them. The same was done with students in higher years.

Although the university had been promoting the use of distance learning tools, the pandemic forced it to speed up the process Along with the intensive use of technology and the incorporation of synchronous platforms for teaching and learning, a process of training and support for teachers and students was carried out. Of particular note was the creation of the web portal Virtual Learning Support Network, aimed at guiding the adaptation of training processes towards a virtual modality in the different dimensions that this entails (fundamentals, methodologies, resources, examples, etc.).

Along with this, additional resources were allocated to significantly accelerate the process of digitisation of library texts, thus providing students with online access to the specialised books and journals they need for their studies.

In order to face the significant decrease of its practical academic activities and the necessary social interaction of students and professors, in 2020 the university started the installation of Hybrid Classrooms in all its campuses, which allow the attendance of students in face-to-face and virtual mode, simultaneously.



# STUDENT MEDICAL SERVICES

The University has a medical service administered by the Welfare Unit of the Directorate of Student Affairs, which provides free primary care in various specialties.

Due to the restrictions imposed by the health crisis, dental care was suspended at the request of the SEREMI of Health, while medical care continued to be provided under the telemedicine modality, albeit with less demand. Thus, in 2020, 639 consultations were provided, compared to 4,653 the previous year.

### PSYCHOEDUCATIONAL SUPPORT

The PUCV provides students who require it with personalised attention from psychologists, psychiatrists, special educators or vocational counsellors.

These services are offered to all students, regardless of their entry cohort, and aim to support their integration into university life and strengthen their learning through psycho-educational reinforcement.

The special academic conditions present during the pandemic in 2020 led to an increase in the number of psychoeducational support activities and the number of participants, reaching 1,190 students.









# RESOURCES AND **EQUIPMENT**

The University provides its students with various resources and equipment to improve their training processes, highlighting Information and Communication Technologies (ICT) as a relevant learning element to strengthen teaching.



### VIRTUAL CLASSROOM

Since 2006, the Institution has consolidated the virtual and systematic accompaniment of the training process through the Virtual Classroom, an asynchronic non face-to-face teaching platform available for all undergraduate and postgraduate courses taught by the University. For its use, various support resources have been generated and virtual and pedagogical support has been provided.

This gained experience made it possible to successfully face the transition to virtuality, as a result of the suspension of face-to-face academic activities due to the pandemic.

During 2020, through the intensive application of technologies and close support to teachers and students to address their classes in virtual mode, the academic calendar was achieved with no interruptions.

### PUCV ICT

### **RESOURCES**

The "PUCV ICT Resources" portal permanently incorporates new technological resources, positioning itself as a reference space for the support and guidance of teaching and learning processes, including devices, software and applications that allow teachers and students to access updated tools that enhance teaching and promote active learning and greater autonomy on the part of students, thereby complementing the work developed in the classroom.

### LIBRARY

### **SYSTEMS**

The University has five major libraries and nine specialised libraries, totalling a total surface area of 7,072 m2 of facilities, which in turn have 1,933 study stations and 352,839 books, as well as a complete digital catalogue with books, specialised journals, theses, films and academic databases distributed throughout all the campuses.

Until 2019, remote access to digital bibliographic content was restricted to academics and postgraduate students. In 2020, the University incorporated new technology that allowed extending access to digital resources to all University students - undergraduate, postgraduate and graduate students.

### ACTIVE PARTICIPATION

### **CLASSROOM (A3)**

The University has three Active Learning Classrooms (A3), which are spaces equipped with technological tools and methodological resources designed to improve the teaching and learning process of students, through horizontal learning environments, moderated by academics who motivate students to learn, research and share their findings.

# STUDENT MOBILITY AND EXCHANGE

Student mobility activities help to deepen the incorporation of the international dimension in various areas of institutional work.

Through agreements signed both bilaterally and with international mobility networks, students can carry out exchanges in more than 450 universities around the world. This is done through the Student Mobility Programme (PME), which provides various forms of support, such as scholarships and intensive language courses (English, Italian and French). The PALE Programme, which offers German language courses, is also part of this programme.

The University also promotes the presence of foreign students through the International Student Exchange Programme (ISEP), which before the health crisis was distinguished by its sustained growth.

In 2020 the number of student mobility participants decreased due to the border closure as of March.

#### STUDENT MOBILITY AND EXCHANGE

	2019	2020
Number of international students in the PUCV	808	368
Number of PUCV students on Exchange Programs	191	86

Source: Department of International Relations, Vicerectorate of Development.

# POSTGRADUATE **EDUCATION**

The University continues to make progress in the consolidation, quality, positioning and variety of its postgraduate offer. In 2020 it began to implement a series of curricular reforms of the postgraduate programs, which it intends to continue during 2021, in order to review and perfect the curricular plans and their corresponding educational projects.

Despite the health context, there was an increase in postgraduate programs. In terms of master's degrees, a total of 35 programmes were offered, while 18 Doctoral programmes were offered. With regard to the latter, two new programmes were added to the postgraduate offer, corresponding to the Doctorate in Electrical Engineering and the Doctorate in Science Didactics. In the case of the master's programmes, the Master's in Architecture and Design was incorporated, which, although it was previously offered, modified its curricular focus.

Due to the health contingency, the dissemination and promotion of the postgraduate academic offer through networks and digital spaces became essential. To this end, in 2020 work began on positioning the "Postgraduate PUCV" brand, with a presence at virtual fairs, publications in the media and updating the www. pucv.cl/postgrado portal.

#### **POSTGRADUATE EDUCATION**

	2019	2020
Masters programs	32	33
Total enrolment in Masters programs	1.267	1.234
Masters Graduates	378	500
Foreign Masters Students	80	73
Masters Students with ANID Scholarships	33	50
Doctoral Programs	16	18
Total enrolment in Doctoral programs	370	398
Doctoral Graduates	58	41
Foreign Doctoral Students	65	76
Doctoral Students with ANID Scholarships	125	136

### DOCTORAL PROGRAMS

### **PROGRAMS**

Doctor of Sciences in Chemistry  Doctor of Physical Sciences  Doctor of Education in Mathematics  Doctor of Mathematics  Doctor of Aquaculture  Doctor of Law  Doctor of Philosophy  Doctor of Linguistics  Doctor of Literature  Doctor of History  Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education  Doctor of Electrical Engineering	
Doctor of Education in Mathematics  Doctor of Mathematics  Doctor of Aquaculture  Doctor of Philosophy  Doctor of Linguistics  Doctor of Literature  Doctor of History  Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Sciences in Chemistry
Doctor of Mathematics Doctor of Aquaculture Doctor of Law Doctor of Philosophy Doctor of Linguistics Doctor of Literature Doctor of History Doctor of Psychology Doctor of Engineering Sciences in Biochemical Engineering Doctor of Computer Sciences Doctor of Industrial Engineering Doctor of Biotechnology Doctor of Agri-food Sciences Doctor of Science Education	Doctor of Physical Sciences
Doctor of Aquaculture  Doctor of Law  Doctor of Philosophy  Doctor of Linguistics  Doctor of Literature  Doctor of History  Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Education in Mathematics
Doctor of Law  Doctor of Philosophy  Doctor of Linguistics  Doctor of Literature  Doctor of History  Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Mathematics
Doctor of Philosophy Doctor of Linguistics Doctor of Literature Doctor of History Doctor of Psychology Doctor of Engineering Sciences in Biochemical Engineering Doctor of Computer Sciences Doctor of Industrial Engineering Doctor of Biotechnology Doctor of Agri-food Sciences Doctor of Science Education	Doctor of Aquaculture
Doctor of Linguistics  Doctor of Literature  Doctor of History  Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Law
Doctor of Literature  Doctor of History  Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Philosophy
Doctor of History  Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Linguistics
Doctor of Psychology  Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Literature
Doctor of Engineering Sciences in Biochemical Engineering  Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of History
Doctor of Computer Sciences  Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Psychology
Doctor of Industrial Engineering  Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Engineering Sciences in Biochemical Engineering
Doctor of Biotechnology  Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Computer Sciences
Doctor of Agri-food Sciences  Doctor of Science Education	Doctor of Industrial Engineering
Doctor of Science Education	Doctor of Biotechnology
	Doctor of Agri-food Sciences
Doctor of Electrical Engineering	Doctor of Science Education
	Doctor of Electrical Engineering



### MASTER **PROGRAMS**

### **PROGRAMS**

Master of Mathematics
Master of Statistics
Master of Sciences in Physics
Master of Sciences in Microbiology
Master of Education in Mathematics
Master of Education in Experimental Sciences
Master of Agronomic and Environmental Sciences
Master of Banking and Financial Markets
Master of Management
Master of Business Administration
Master of Communication
Master of Social Work
Master of Oceanography
Master of Aquatic Resource Management
Master of Law
Master of Criminal Law and Penal Sciences
Master of Applied Linguistics
Master of History
Master of Philosophy
Master of Latin American Cultural and Literary Studies
Master of Education, mention in Educational Evaluation
Master of Scholastic Organization Leadership and Management
Master of Engineering Sciences in Biochemical Engineering
Master of Engineering Sciences in Electrical Engineering
Master of Computer Engineering
Master of Environmental Engineering
Master of Construction Engineering
Master of Transport Engineering
Master of Industrial Engineering in Asset Management and Operational
Reliability
Master of Industrial Engineering
Master of Public Administration
Master of International Relations
Master of Clean Development and Energy Efficiency
Master of Physical Activity for Health
Master of Architecture and Design

### POSTGRADUATE **SCHOLARSHIPS**

In 2020, due to the contingency, all the Thesis Completion Grants that were applied for by students were allocated, which meant an increase of 50% in the delivery of this benefit with respect to 2019.

There was a significant change in the application process for Maintenance Grants for foreign doctoral students in terms of the call for applications and application tools through the platform of the Ibero-American University Association for Postgraduate Studies (AUIP). With regard to the ANID Scholarships, there was an increase of 15% in the case of Doctorates and 25% for Master's programs, with respect to the previous year, reaffirming the constant support that the Directorate of Graduate Studies and the postgraduate programs provide to students who choose to continue their studies at our University.

#### **N° OF POSTGRADUATE STUDENTS WITH ANID SCHOLARSHIPS**

BECAS ANID	2019	2020
Masters	33	50
Doctorates	125	136
Total	158	186

Source: Department of Graduate Studies, Vice rectorate of Research and Graduate Studies.

#### **N° OF POSTGRADUATE STUDENTS WITH INTERNAL SCHOLARSHIPS**

INTERNAL SCHOLARSHIPS	2019	2020
Fee waivers	202	255
Maintenance	131	104
Completion of Thesis	30	45
Research Trips	10	0
Scientific events	24	0
Visiting lecturers	16	0
Mentors	3	1
Total	416	405

Source: Department of Graduate Studies, Vice rectorate of Research and Graduate
Studies.

### TOTAL AMOUNT FOR INTERNAL SCHOLARSHIPS (M\$)

2019	661.550
2020	686.560

Source: Department of Graduate Studies, Vice rectorate of Research and Graduate Studies.

Studies.

## INTERNATIONAL POSTGRADUATE PROJECTION

As one of the commitments of the Strategic Development Plan 2017 - 2022, the University has developed a robust and varied postgraduate offer with more than 1,600 foreign students, mostly from Latin America.

In 2020, and despite the complex global health situation, the Directorate of Graduate Studies continued to support a series of activities to promote internationalisation. Of particular note was the participation in the Virtual Fair "Studying in Chile: Postgraduate and Continuing Education", organised by Learn Chile, which brought together 24 higher education institutions from various Latin American countries, such as Peru, Colombia, Costa Rica, Ecuador, Bolivia and Mexico.

The University has considered within its action plans the generation of international alliances, as has been the case of the agreement signed with the Ibero-American University Postgraduate Association (AUIP) in 2019, which has allowed the Institution to access the awarding of technical missions for the improvement of its programmes and awards for excellence. Three programmes have been recognised for their quality: the Doctorate in Biotechnology (in conjunction with the UTFSM); the Doctorate in Physical Sciences (in consortium with the UTFSM) and the Doctorate in Engineering Sciences with a mention in Biochemical Engineering.

Likewise, the University's participation in the Inter-University Development Centre (CIND), which brings together almost 40 Latin American universities, has enabled the University to offer, through the PIU-CINDA program, vacancies in doctoral programmes to receive both students and trainees or researchers from Europe and Latin America attached to partner institutions.

Also noteworthy is the increase in the number of co-directed or co-supervised thesis agreements, which reached 28 in 2020.

In the same period, the PUCV joined the postgraduate scholarship platform "Progressio Americae", an initiative of the Organisation of Catholic Universities of Latin America and the Caribbean (ODUCAL), which aims to offer scholarships in Master's and Doctoral programmes for managers, academics and officials of the universities in the network.

The scholarship offered by the program includes a 100% exemption of the monthly tuition fee during the programme and a 100% exemption of the registration fee at the host university. The institution from which the scholarship holder comes from will have to accept the paid leave of absence and support his/her stay, in the case of a face-to-face programme.





# ACADEMIC **EXCELLENCE**

In order to have teachers of excellence, the academic staff development policy has focused on the sustained introduction of teachers with high academic qualifications. In parallel, the Institution has developed a systematic strategy of teacher training, aimed at developing and enhancing the pedagogical skills of academics.

In 2020, the PUCV had a total of 1,450 academics with vast disciplinary experience.

	2019	2020
Full Time Equivalents (FTE)	665	668
Total academics	1.415	1.450

Source: Department of Institutional Analysis and Strategic development, Vice rectorate of Academics.

### LECTURER CONTINUOUS IMPROVEMENT

Through the University Teaching Improvement Unit (UMDU), the University carries out numerous and diverse actions aimed at improving the quality of teaching, both for newly recruited academics and those with a longer track record.

These actions include the University Teaching Workshops, which offer training alternatives in teaching, learning and assessment strategies; and the Diploma in University Teaching, which aims to strengthen the teaching skills of academics in order to improve the quality of undergraduate student learning.

#### **PARTICIPANTS AND ACTIVITIES UMDU**

ACTIVITY	2019	2020
Diploma in university teaching	30	29
Diploma in Virtual University Training (First version)	0	61
Assistant Teacher Training	121	211
Teacher Improvement and Innovation Program	52	54
Workshops in university teaching	403	276*
Integral Assessments	39	0
Participants each year	645	603

\*The number represents participations, not people Source: University Teaching Improvement Unit (UMDU), Vice rectorate of Academics.

### UNIVERSITY TEACHING DIPLOMA COURSES

The tenth version of the Diploma in University Teaching in 2020, enabled a total of 29 lecturers to strengthen their teaching skills in order to improve the quality of undergraduate students' learning.

### WORKSHOPS ON UNIVERSITY TEACHING

With the aim of developing competencies for the design and application of concrete improvements in university teaching in a virtual context, the workshops, in their four annual seasons and between seasons, had a total of 276 academic participants. It is worth mentioning that the workshops responded to the diverse needs of the virtual teaching and learning context demanded by the pandemic; therefore, the modality, topics, contents and activities offered were updated.

### PROGRAM FOR THE IMPROVEMENT AND INNOVATION OF UNIVERSITY TEACHING

The program provides financial support to initiatives by teaching teams to optimise and innovate the teaching and learning process of their undergraduate students. During 2020, 54 lecturers from 18 academic units received support for the implementation of 27 projects.

### ASSISTANT TRAINING PROGRAMME

Program aimed at developing pedagogical tools for University assistants, in order to strengthen support for the training process of undergraduate students. In 2020, a total of 211 participants graduated from the programme through virtual workshops, renewed in terms of modality, content and activities.

### RESOURCES FOR E-LEARNING IN THE PANDEMIC

In its eagerness to promote the autonomous learning of its teachers in subjects related to virtual teaching and learning in the context of the pandemic, in 2020 the UMDU developed a series of resources that included 22 videos of teaching innovations, three manuals to support virtual teaching and assessment, six tutorials, five tip sheets, eight explanatory videos from PUCV teachers and 30 exemplification materials of training material. In the same way, a website was created to facilitate access to virtuality for students.

### COMPREHENSIVE CONSULTANCY SERVICES

The UMDU's consultancy services meet specific needs for further training in the field of university teaching. Due to the pandemic and the need to cover the cross-cutting needs of teachers in the pedagogical use of ICT for virtual teaching, no specific consultancy services were provided to academic units.



### LECTURER EVALUATION SYSTEM

As part of the culture of quality assurance, teaching evaluation is part of the Integrated Academic Performance System (SIEDA) and is carried out regularly every academic period.

The collection of information is carried out through four questionnaires, two of general application to all courses at the University and two specific to pedagogical practices. These are: Student Opinion Questionnaire, Teaching Performance Self-Assessment Questionnaire, Student Opinion Questionnaire on Intermediate Pedagogical Practices and Student Opinion Questionnaire on Final Pedagogical Practices.

In 2020 the Student Opinion Questionnaire, modified and adapted for pandemic conditions, had an average response rate of 94%.

# QUALITY **ASSURANCE**

From the outset, the University has been committed to the quality of the tasks it performs, since its own identity finds meaning in competent and responsible action.

In compliance with the Strategic Development Plan, in 2020 the Quality Assurance Policy of the PUCV was published, which reflects the trajectory that the University has followed in this line and establishes that its scope covers all its processes, as well as defining lines of action aimed at strengthening quality.

The policy makes explicit that the meaning the Institution gives to quality lies basically in the fulfilment of its purposes.



### DEGREE **ACCREDITATIONS**

During 2020, the National Accreditation Commission (CNA) did not carry out external evaluation processes at the PUCV. However, in compliance with the accreditation requirements imposed by the Quality Assurance Law for teaching programs, the background information for the accreditation of Teaching in Spanish and Communication and Teaching in Basic Education was presented.

On the other hand, self-assessment processes were carried out without the aim of accreditation. Three degree programs completed self-assessment processes, following CNA procedures: Civil Engineering, Transport Engineering and Mechanical Engineering. A new self-assessment process was designed to support academic units in the quality assurance of their programs, and the implementation of this process began in a first group of degree programs: Food Engineering, Civil Mining Engineering, English-Spanish Interpreting, Oceanography and Medical Technology.

At Master's level, the following programs were accredited:

- Master of Sciences in Microbiology, accredited for 6 years.
- Master of Latin American Cultural and Literary Studies, accredited for 5 years.
- Master of Physical Activity for Health, accredited for 2 years.
- Master of Sciences, with a mention in Physics, accredited for 3 years.

The following programs also presented information: Master's in Philosophy, Master's in International Relations and Master's in Mathematics.

Four doctoral programmes were accredited:

- Doctorate in Physical Sciences, accredited for 9 years.
- Doctorate of Science with a mention in Chemistry, accredited for 8 years.
- · Doctorate in Literature, accredited for 5 years.
- Doctorate in Philosophy, accredited for 2 years.

The background of the following programs was presented: PhD in History, PhD in Linguistics, PhD in Psychology and PhD in Philosophy.

In relation to postgraduate programs, the average doctoral accreditation was 4,8 years, with 15 programs accredited, i.e., 83%. The average Master's accreditation reached 5,2 years, with 19 accredited programs, representing 58%.

# RETENTION AND TIMELY GRADUATION

As a result of the development of support and accompaniment programs, the University, in recent years, has managed to improve and maintain first-year retention, reaching 88% in undergraduate students in 2020.

In addition, there was a reduction in the time to graduation of undergraduate students, a figure that stands out together with the increase in the rate of graduation and/or timely graduation of undergraduate and master's degree students.

### **ACADEMIC RETENTION**

	2019	2020
Retention of first year undergraduates	80%	88%
Retention of first year master's students	89%	89%
Retention of first year doctoral students	97%	92%

### **TIME TAKEN TO GRADUATE**

	2019	2020
Time to graduate – undergraduate degrees (in semesters)	13,5	12,8
Time to graduate – master's degrees (in semesters)	6,4	6,4
Time to graduate – doctorates (in semesters)	11,9	12,3

### **GRADUATE RATE**

	2019	2020
Timely graduation rate – undergraduate degrees	24%	26%
Timely graduation rate – masters	50%	66%
Timely graduation rate – doctorates	37%	31%

 $Source: Department \ of \ Institutional \ Analysis \ and \ Strategic \ development, \ Vice-rectorate \ of \ Development.$ 

# PERSONNEL **MANAGEMENT**

Recognising the importance of the well-being and dignity of the people who make up the PUCV, the organisational culture favours the adequate development of its staff members, in order to safeguard the integrity and quality of its academic and administrative services.



### TRAINING AND **DEVELOPMENT**

The University manages the development of administrative and service staff through an integrated set of annual training programmes and plans, which strengthen their personal and professional competencies and skills, responding to the needs identified in the performance evaluation process and the guidelines of the Strategic Development Plan.

During the period, there was an increase in the number of training hours, which responds to the requirements of external regulatory compliance with Covid-19 protocols, as well as training concerning non-face-to-face work, such as digital tools and psychosocial matters, necessary to adapt to the new ways of working. This is in addition to the development of capacities and skills in effective communication and customer service for staff.

In 2020, a total of 120,438 hours were spent on training, reaching an average rate of 61,23 hours per staff member, with an emphasis on topics related to office automation, use of web platforms and Covid-19 prevention.

### **TRAINING HOURS BY GENDER**

	2019		2020	
	Males	Females	Males	Females
Total number of training hours	5.146	13.811	66.147	54.291
N° of employees	1.026	877	1.024	896
Average hours by gender	5,02	15,75	41,65	41,74

#### TRAINING HOURS BY EMPLOYEE CATEGORY

		2019			2020	
	N° of employees	Total training hours	Average hours by category	N° of employees	Total training hours	Average hours by category
Academic	12	191	16	402	20.059	49,90
Administrative	72	2.332	32	180	9.054	50,30
Agricultural	1	8	8	4	200	-
Catering	2	42	21	15	750	50,00
Assistance	116	3.074	27	381	32.794	93,95
Library	0	0	0	50	2.530	50,60
Professional and Technical	184	7.457	41	635	35.415	55,77
Secretaries	92	5.097	55	178	9.980	56,07
Services	21	698	33	62	3.716	59,94
Directors	0	0	0	15	810	54,00
Management	3	58	19	45	2.130	47,33
Total	503	18.957	38	1.967	120.438	61,23

 $Source: Department \ of \ Administration, \ General \ Direction \ of \ Economic \ and \ Administrative \ Affairs.$ 

### PERFORMANCE **EVALUATION**

Performance appraisal is a systematic and structured practice that seeks to contribute to efficiency, productivity and improved compliance with management and service standards.

During 2020, the evaluation was carried out for the first time through the University's People Management System, allowing for an improved, more rigorous and orderly process. An increase in participation could be observed in its three stages, with the evaluation by staff members being the one with the highest participation at institutional level.

	PUCV 2019	PUCV 2020	
Staff Evaluation	926	1.050	
Staff Evaluation	90%	94%	
Manager Fredrick	748	909	
Manager Evaluation	73%	81%	
Joint Evaluation	556	665	
Joint Evaluation	54%	59%	

Source: Department of Administration, General Direction of Economic and Administrative Affairs.



### BENEFITS

The PUCV provides a set of benefits and services that contribute to the quality of life, job satisfaction and prosperity of employee's family groups.

These benefits, in terms of education, housing, health, family, insurance, among others, have historically been provided by the Institution or have been incorporated in collective bargaining processes.

The University has a Welfare System for its staff, which provides a series of benefits financed through the monthly cash contribution made by its members, which is supplemented by the University with a matching contribution. In 2020 the amount in reimbursements and grants from the Welfare System was \$231,249,000, lower than the previous year's figure of \$393 million pesos.

Among the most valued benefits is the financing of 100% of the annual tuition fees for undergraduate studies for the children of staff for all the years of the chosen course. In 2020 more than 200 workers obtained this benefit, with an associated amount of \$671 million pesos.

#### **PUCV STAFF BENEFITS**

PUCV 2019	PUCV 2020
<ul> <li>SALUD Y SEGUROS</li> <li>Life insurance</li> <li>Catastrophic insurance</li> <li>Health exams for all staff members</li> <li>Payment for the first three days of medical leave</li> <li>Flu vaccination</li> <li>Agreements with clinics and opticians</li> <li>Reimbursement of medical expenses, dental and ophthalmic consultations</li> </ul>	<ul> <li>HOUSING</li> <li>Assignation for house purchases</li> <li>Loans</li> <li>Assessments</li> <li>Deposit agreed for housing purposes 1+1</li> </ul>
<ul> <li>FAMILY</li> <li>Creche monthly bonus</li> <li>Vacation or school loans</li> <li>Agreements for school purchases</li> <li>Summer camp for children of staff members</li> <li>Winter holiday activities for children staff members</li> <li>Children's day celebration</li> <li>Vocational orientation workshop</li> </ul>	<ul> <li>EDUCATION</li> <li>100% undergraduate scholarship for children of PUCV staff members.</li> <li>50% fee scholarship for children of PUCV staff members in CFTUCEVALPO.</li> <li>Student bonuses loans</li> <li>Study leave</li> </ul>
Prize for years of service     Prize for academic and research excellence  ASSISTED RETIREMENT PROGRAM	ADDITIONAL BENEFITS     Emergency loans

#### ASSISTED RETIREMENT PROGRAM

This program offers a number of actions and benefits aimed at supporting the transition of its employees into retirement, including individual counselling, briefings and compensation for years of service.

During 2020 the program worked specifically with staff members that began the process due to their age. A total of 18 employees participated.

## OCCUPATIONAL HEALTH AND SAFETY

After the World Health Organization (WHO) declared Covid-19 a public health emergency of international concern, the University acted promptly to ensure the safety of its employees.

By suspending its face-to-face work and introducing remote work, except in cases where it was necessary to take care of institutional spaces, the PUCV took on the challenge of creating a new form of risk prevention culture, which required flexibility in providing solutions to people exposed to various hazards.

The support of the PUCV focused on the design of protocols and preventive instructions to self-care measures and psychological recommendations in the face of confinement, contributing to the containment of workers and their families.

### JOINT HEALTH AND SAFETY COMMITTEES

During 2020, a highlight was the work of the members of the Joint Health and Safety Committees, who have played a fundamental role in the control and supervision of compliance with the preventive measures emanating from the protocols and instructions established by the University to prevent the spread of Covid-19 within the university premises.

### PREVENTIVE TECHNIQUES IN TIMES OF COVID-19 COURSE

As an additional measure to the protocols and instructions established by the University, the Risk Prevention Unit together with the Training area of the Human Resources Department, designed and prepared the course "Covid-19 prevention techniques", which deployed a series of recommendations to prevent the spread of the virus causing the pandemic, promoting personal self-care and work teams, which is mainly based on the regulations issued by the country's health authority.

### COURSES AND WORKSHOPS ON RISK PREVENTION

The Risk Prevention Unit, in conjunction with the Institute for Work Safety (IST), conducted a series of trainings aimed at strengthening self-care and preventive culture in the different functions performed by workers. In 2020, a total of 1,264 workers were trained in different subjects, such as basic first aid, teleworking, ergonomic risks, psychosocial risks for application committees, among others.

### SAFETY INDICATORS

The necessary containment measures established by the health authorities to contain the pandemic's advance during 2020 limited the number of people on campus, thereby reducing the exposure of workers to hazards that could cause accidents due to or on the occasion of work. As a result, the accident and accident rate tended to fall compared to the previous year, which is why the contribution rate remained at the lower end of the range.

The accidents reported were all moderate and minor, as in the previous period. Thus, for 2020, there were 29 events covered by the occupational accidents and diseases insurance, of which 58% were occupational accidents, 35% commuting accidents and 7% occupational diseases.





	2019	2020
Accidents at work	69%	58%
Accidents in journeys to work	31%	35%
Professional diseases	0%	7%

	2019		2020			
	Male	Male Female		Female		
Accident Rate	2,4%	1,9%	0,39%	0,72%		
Total Accident Rate	2,	2,1		2,1 0,52		52
Severity Rate	50%	21%	3,51%	6,29%		
Total Severity Rate	34,7		4,5	7%		

Source: Department of Administration, General Direction of Economic and Administrative Affairs.

### LABOUR **RELATIONS**

On the basis of a culture of dialogue, the University maintains a climate of trust and collaboration with all its employees.

It has two unions and a unionisation rate of 74% of its non-academic staff, which is well above the national average. The Inter-company Union N°1 of Workers and the Alberto Hurtado Cruchaga Union together represent 952 workers.

#### **UNIONISED WORKERS**

			<del>-</del>
YEAR	NUMBER OF UNIONIZED EMPLOYEES	TOTAL NUMBER OF EMPLOYEES	PROPORTION OF UNIONIZED NON-ACADEMIC EMPLOYEES
2019	932	1.292	72%
2020	952	1.280	74%

Source: Administration Department, General Direction of Economic and Administrative
Affairs.

### EMPLOYEE **REMUNERATIONS**

The PUCV has a remuneration scale that establishes salary categories and ranges by grade for groups of positions, making it possible to generate a common framework of internal salary equity, within the framework of its commitment to an adequate and equitable remuneration system.

In January 2020, the University implemented a policy that establishes a minimum monthly income for employees amounting to \$500,000 gross. This income includes those components of fixed and variable monthly remuneration, as well as the mobilisation allowance.

For the period, the ratio between the 90th percentile and 10th percentile total compensation value is 5,4.

### STAFF **NUMBERS**

In 2020, the University had 1,450 academics and 1,280 administrative and service staff. During that year, progress was made in narrowing the gender gap, with 52% of the administration and services staff being female. In terms of the age range of administration and services staff, as in the previous year, 62% were between 30 and 50 years of age.

On the other hand, the turnover rate for administrative and service staff for 2020 was 10,8%. The decrease compared to 2019 can be explained by the way the values are calculated, as in 2020, averages are no longer used.

#### **ACADEMIC STAFF**

		2019			2020	
Time	Female	Male	Total	Female	Male	Total
Full time	179	355	534	182	350	532
Part time	22	23	45	19	20	39
Amplified Part Time	13	5	18	11	5	16
Per hour	336	494	830	351	512	863
Total	550	877	1.427	563	887	1.450

#### ADMINISTRATIVE AND SERVICE STAFF

### STAFF BY CONTRACT TYPE AND GENDER

		2019			2020	
Type of contract	Female	Male	Total	Female	Male	Total
Indefinite	562	556	1.118	567	589	1.156
Fixed term	72	102	174	45	79	124
Total	634	658	1.292	612	668	1.280

#### STAFF BY CONTRACT TYPE AND REGION

	20	19	2020	
Type of Contract	Valparaiso Region	Metropolitan Region	Valparaiso Region	Metropolitan Region
Indefinite	1.107	11	1.144	12
Fixed term	171	3	123	1
Total by region	1.278 14		1.267	13
Total	1.2	92	1.2	80

### STAFF BY EMPLOYMENT TYPE AND GENDER

	2019		202	0
Employment Type	Male	Female	Male	Female
Administrative	40	47	40	50
Agricultural	17	0	16	0
Catering	11	6	10	6
Assistance	167	56	167	56
Library	11	4	9	4
Professional and Technical	292	358	277	367
CRC Teacher	0	164	0	162
Secretaries	61	0	62	0
Services	16	19	16	17
Directors	17	6	15	6
Total by gender	632	658	612	668
Overall Total	1.292		1.28	0

### ADMINISTRATIVE AND SERVICE STAFF TURNOVER RATE

	201	9	2020	
	Male Female		Male	Female
Turnover rate by gender	14,2%	20,3%	9,6%	12%
Overall turnover rate	17,27%		10,8	3%

### TOTAL NEW HIRES AND TURNOVER OF ADMINISTRATIVE AND SERVICE STAFF BY GENDER

	Males	Female	TOTAL	% of workforce
Hiring's 2019	96	147	243	18,8%
Turnover 2019	82	111	193	14,9%
Hiring's 2020	46	74	120	9,38%
Turnover 2020	74	85	159	12,42%

### TOTAL HIRINGS OF ADMINISTRATIVE AND SERVICE STAFF BY AGE GROUP

<b>,</b>	201	9	2020		
	Males	Females	Males	Females	
Less than 30 years	38	58	11	30	
Between 30 and 50 years	50	76	32	37	
Over 50 years	8	13	3	7	
Total by gender	96	147	46	74	
Consolidated total	243		120	)	

### TOTAL TURNOVER OF ADMINISTRATIVE AND SERVICE STAFF BY AGE GROUP

	201	9	2020		
	Males Females		Males	Females	
Less than 30 years	16	31	7	19	
Between 30 and 50 years	47	61	50	54	
Over 50 years	19	19	17	12	
Total by gender	82	111	74	85	
Consolidated total	193	3	159	)	

Source: Administration Department, General Direction of Economic and Administrative Affairs.

### **ECONOMIC MANAGEMENT**

The University is characterised for maintaining an orderly and stable financial situation, capable of ensuring the delivery of quality academic services and giving continuity over time to its institutional project.

Within the framework of the Strategic Development Plan, a series of improvements have been made in the management of financial resources, which have had a favourable impact on the levels of efficiency, safeguarding and good use of institutional resources. In this sense, the diversification of sources of income has been raised as a permanent need.

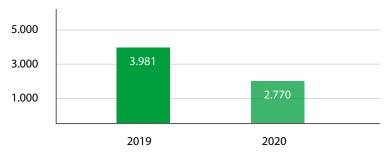
In 2020, financial management faced a number of complexities as a result of the pandemic and the economic downturn in the country. In addition to the significant decrease in income for the University, especially during the first half of the year, there was an increase in unplanned expenditure, including financial aid for vulnerable students and investment in technology to support distance learning and teaching.

### INSTITUTIONAL **DEBT**

As has been the case in recent years, the Institution considers for external borrowing purposes only those matters related to the financing of its academic staff dismissal policy and those associated with the development of infrastructure projects, derived from the implementation of the Physical Spaces Master Plan. However, as a consequence of the pandemic, no bank financing for infrastructure projects was used during 2020.

On the other hand, and as has been the case over the last decade, all operational and short-term requirements were covered by resources from funding sources linked to the annual budget, mainly derived from undergraduate activity and the associated fees.

#### The PUCV's Debt Servicing (Million pesos)



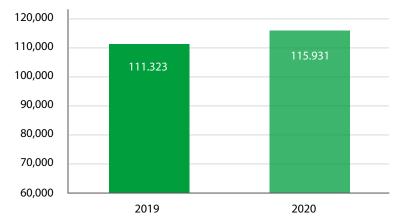
Source: Department of Finance, General Direction of Economic and Administrative Matters.

### INSTITUTIONAL

From a financial perspective, the University is subject to a budgetary regime that seeks to maintain an adequate balance between the sources and needs of funding and the use of institutional resources. Thus, in accordance with the annual budgetary guidelines issued by the Rector's Office, the annual budget is established, which allows the University to finance both the commitments derived from the Institutional Strategic Development Plan and the operational needs of each of the areas that make up the University.

The graph below shows the evolution of revenue from ordinary activities, as reported in the Institution's financial statements on 31 December 2020, compared to the financial year 2019. It should be noted that, despite a decrease in first-year enrolment this year, the increase in higher education enrolment resulted in a net increase in income from regular undergraduate enrolment.

#### Ordinary Activity Income (million pesos)

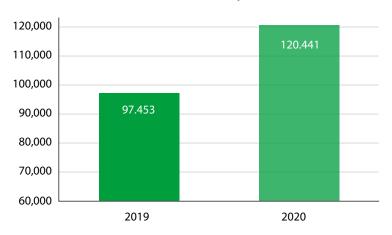


Source: Department of Finance, General Direction of Economic and Administrative Matters.

### **ASSETS**

During 2020 there was an increase in the University's equity compared to the previous period, from \$ 97,453 million to \$ 120,441 million, which is explained, among other aspects, by the accumulated results as a consequence of the results obtained by the Institution during the period.

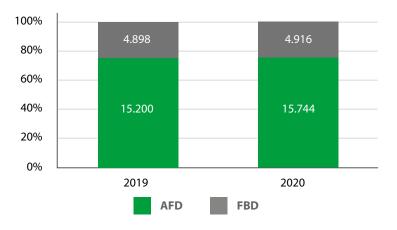
### **PUCV Assets (Million pesos)**



Source: Department of Finance, General Direction of Economic and Administrative Matters.

### SUPPORT FROM THE STATE

In terms of contributions received from the state, during 2020 it is possible to observe a small increase in the basal contribution figure and in the direct fiscal contribution received. Both increases derive from ministerial definitions and the good institutional indicators considered for the delivery of these resources. These contributions are fully earmarked for the achievement of institutional objectives, as set out in its Strategic Development Plan, and to contribute to the continuous improvement in the delivery of educational services.



Source: Department of Finance, General Direction of Economic and Administrative Matters.



In order to guarantee the operation and offer a quality service on the campuses and sites, the Administration Department has services provided by internal staff and others that are outsourced, such as: security services, canteen services, maintenance, cleaning, maintenance of green areas and transport of students and staff to the Curauma and Agronomy Campuses.

#### **PAYMENTS TO SUPPLIERS**

2019	2020
\$2.561.656.318	\$1.808.324.102

Source: Administration Department, General Direction of Economic and Administrative Affairs Administrativos.

#### **SECURITY**

The University operates external security services at the following sites: School of Food Sciences, Institute of Music, Institute of History, Institute of Art, School of Mechanical Engineering, IBC Building, Curauma Campus, School of Architecture and Design, Sausalito Campus, Institute of Mathematics, School of Agronomy, School of Ocean Sciences and Aulario and School of Chemical Engineering.

In order to comply with legal regulations, these companies are required to comply with the legal regulations on subcontracting, Law No. 20.123. The Services and Surveillance Unit supervises that the company complies with the Carabineros private security office's OS-10 operating directive, which certifies that the personnel are authorised to carry out guard duties.

### **FOOD**

In order to guarantee the food service for staff, students and teachers, the University has outsourced food services in the following locations: School of Architecture, Curauma Campus, School of Ocean Sciences, Institute of Mathematics, School of Mechanical Engineering, School of Agronomy, Faculty of Engineering and Sausalito Campus. The Food Services Unit is constantly monitoring and following up on compliance with quality, hygiene and food handling standards.

#### **CLEANING AND MAINTENANCE**

The Curauma Campus has an external cleaning service in those areas of transit and general use, which is supervised by the Services Unit.

Another important service for the University is the maintenance of campuses and sites. The unit in charge of this activity is the Maintenance Unit.

#### **MOBILISATION AND MAINTENANCE OF GREEN AREAS**

The University has shuttle buses for the Curauma and Agronomy campuses. The service is aimed at students and staff and runs regularly between Monday and Friday. The Mobility Unit ensures that the timetables and Ministry of Transport regulations are complied with.

With regard to the maintenance of green areas, this service corresponds to the Sausalito, Curauma and Rubén Castro Campuses.

# INVESTMENT AND PROGRESS IN INFRASTRUCTURE

In 2020, the PUCV carried out 32 works of different sizes on its different campuses, with an investment of 5,650 million pesos. These works are distributed in a greater percentage in the Brasil and Curauma Campuses; while the remaining works are distributed in the Sausalito Campus, Recreo Campus, Quillota Campus, CEA (Santiago) and independent campuses of the PUCV.

During the year, as a result of the pandemic and quarantines, a limited number of medium-sized works were carried out. Work was also carried out prior to the construction of new buildings, such as the support and excavation work on the Sausalito Campus for the new Institute of Music building, which is expected to be delivered in the second half of 2022.

Meanwhile, on the Recreo Campus, work began on the new Services Building. This building includes living spaces for both the School of Architecture and Design and the School of Business and Economics, a building that was at the completion stage.

The buildings that were initially scheduled for completion in 2020, including the Ocean Sciences Building on the Curauma Campus and the School of Business and Economics on the Recreo Campus, due to the quarantine decreed by the Ministry of Health, have had their construction work delayed and will be completed in 2021.

#### **Heritage recovery of the Central House**

One of the most important restoration works is the start of the heritage recovery project of the Central House, which is co-financed with the Regional Government of Valparaíso and consists of the restoration of the exterior and interior façades of the building, together with comprehensive remodelling of the building's heritage rooms. This work is scheduled for completion in 2022.

#### INFRASTRUCTURE INDICATORS

	2019	2020
Built Surface area (m2)	166.817	185.411
Investment in infrastructure (millions of pesos)	5.225	5.650
M2 per student	10,29	11,15

Source: Department of the Master Plan, Vice rectorate of Development.

### HIGHLIGHTED INFRASTRUCTURE

### **School of Ocean Sciences Building**

The new building of the School of Ocean Sciences, located on the Curauma Campus, corresponds to a new generation of buildings for the University. Sustainability criteria were applied in its design, particularly in the control of mechanical systems, which allow energy savings and improve user comfort. The building under construction consists of five levels, plus a basement, distributed over 3,538 m2. It will house academic, teaching and research activities, as well as the Dean's Office of the Faculty. As of December 2020, the work was 99% complete.



### **School of Business and Economics building**

Located on the Recreo Campus, the new headquarters of the School of Business and Economics is a 4,880 m<sup>2</sup> building consisting of two constructions linked by a stepped courtyard.

The first 4,130 m<sup>2</sup> building, which has two underground levels, four floors and a large roof terrace with a sea view, will be used mainly for classrooms, laboratories, a library, study and living areas, a postgraduate area, a cafeteria and student services.

The other building, of 750 m<sup>2</sup> and five floors, is intended for the teaching and administrative area of the school. As of December 2020, the work was 78% complete.



### School of Civil Engineering and Construction Engineering building

It is located in the block of the Faculty of Engineering, on the Brasil Campus. It has a total built area of 7,796 m<sup>2</sup>, with six floors plus a basement.

The underground, first and second floors of the building will be mainly used for teaching and research laboratories, classrooms and lounge areas.

The third floor is planned as a large, roofed courtyard overlooking the city, which will offer recreational areas, cafeteria and services for the students. In addition, the teaching areas of each school will be linked to this courtyard.

The top three floors correspond to two isolated towers that will house the teaching and administrative offices of each school. As of December 2020, the building was 52% complete.



### SUSTAINABLE CONSTRUCTION



The Pontifical Catholic University of Valparaíso has adopted in its trajectory and, with special emphasis in recent years, a series of elements and criteria that have led to the advancement of sustainable construction standards in the projects developed by the Master Plan Department.

Thus, today the conception of a design that takes advantage of spatial orientations to amplify the benefits of natural lighting, the use of LED technology lighting fixtures, the use of solar heaters for hot water and the use of water-saving sanitary fixtures, are consolidated as the design and construction standard of the PUCV when addressing new initiatives.

In the projects under construction for 2020, sustainable design criteria have been added such as the use of faucets with aerators to reduce water consumption, the development of air conditioning and energy projects with emphasis on energy efficiency and the use of reflective or solar control glass to improve thermal conditions and energy savings in facades with greater exposure to solar radiation.

### URBAN DEVELOPMENT

The works developed by the PUCV incorporate architectural elements that contribute to the urban development of its surroundings, providing infrastructures that are integrated into the community and enhance its development.

Integrating buildings with the direct urban environment: designs that link the university and the city has been promoted. This is the case of the new building of the Schools of Civil Engineering and Construction Engineering, located on the Brasil Campus, whose recessed corner entrance incorporates the public space of Avenida Brasil into the interior of the building. Likewise, each of the living areas are located with visual openings towards the city, favouring communication with the urban environment.

In addition, this building will result in works on the urban transport system within a radius of approximately 200 metres, according to the approved Urban Transport System Impact Study (EISTU).

**Buildings that respect the community in which they are located:** aware of the value of the interactions between the University and its surroundings, all the necessary mitigation measures have been taken, in addition to compliance with the regulations in force in this respect. Likewise, permanent communication has been maintained with the neighbours of the works under construction on the Recreo Campus and Brasil Campus.

### SUSTAINABLE CONSTRUCTION MANUAL



The manual seeks to compile and store all the initiatives related to the specification and design in the works that have begun to be incorporated in the projects, where sustainability has a preponderant role, as well as challenges in the use of new technologies found in the national and international environment and that constitute a standard to be achieved.





# ENVIRONMETNAL **MANAGEMENT**

In its commitment to reconcile its growth with care for people and the environment, the University has continued to strengthen environmental management in the operation of its campuses and premises, as well as the integration of these issues in the education of its students. In addition, its specialised centres and academic units are contributing to solving the challenges posed by climate change.

In this way, the University is making progress in the commitments subscribed to in the framework of the Sustainable Campus Clean Production Agreement (APL), whose certification it obtained in 2017 from the Agency for Sustainability and Climate Change (ASCC).

### STRENGTHENING SUSTAINABILITY

In 2020, the implementation of the project "Strengthening sustainability management", awarded by the Ministry of Education through a Regional Higher Education Agreement, began. This project includes, among its lines of work, campus management, which is why during the period progress was made in the generation of protocols and standards, in order to have an environmental action plan that allows for the definition of goals and periodic evaluations. Along with this, and with regard to the operation of the campuses, investments were made to provide the University with a recycling system and the replacement of lighting fixtures in the Central House.

#### **CENTRE FOR CLIMATE ACTION**

In 2020 the University was awarded a new Regional Higher Education Call for Proposals project to establish the PUCV Centre for Climate Action, which aims to provide an interdisciplinary response to climate change.

During the first year of implementation, the Centre has made an important contribution to the school system, with the creation of pedagogical material and the training of teachers in this area.

In addition, it deployed a Citizen Air Quality Network for Early Childhood, which through objective information seeks to contribute to the reduction in exposure to air pollutants of children living in areas exposed to high levels of pollution in various regions of the country.

In terms of public policy, the Centre for Climate Action has contributed to the legislative process of the new climate change law and the glaciers law; and at the international level, together with the Global Adaptation Centre of the Netherlands, it has collaborated in the call for a sustainable and inclusive recovery, generating recommendations for CELAC member countries, among other initiatives.



#### POETA PROJECT OF THE SAN IGNACIO DEL HUINAY FOUNDATION

Immersed in an imposing native forest within 34 thousand hectares in the Province of Palena, are the facilities of the San Ignacio del Huinay Foundation, a non-profit organisation founded in December 2001 by the Pontifical Catholic University of Valparaíso and the company Enel Generación, which seeks to defend and promote the value of the bio-geographical heritage of this locality.

In this natural laboratory and under a scenario of climate change, the Scientific Research Centre was set up by the PUCV School of Ocean Sciences. One of the most relevant initiatives is the Programme for the Observation of the Aquatic and Terrestrial Ecosystem of Chilean Patagonia (POETA), which investigates the impact of climate variability and change on terrestrial and aquatic ecosystems.

The centre also plays a role in scientific dissemination, highlighting the Huinay Summer School, a theoretical-practical program that brings together researchers from the University, the country and abroad.



# MEASUREMENT OF THE CARBON FOOTPRINT

In the context of a climate crisis due to global warming, the University is committed to reducing its Greenhouse Gas (GHG) emissions. In 2020, it joined the United Nations-backed Raze to Zero initiative, which aims to join forces to reduce carbon emissions globally.

In this context and as committed in the previous Sustainability Report, during 2020 a measurement was carried out that considered scopes 1, 2 and 3, thus including direct and indirect GHG emissions resulting from organisational activity and incorporating fixed sources, electricity consumption, waste management, services and purchased goods.

With this measurement, the University recognises the impacts generated, which allows it to take prevention, mitigation and/or compensation measures.

### **TOTAL GHG EMISSIONS**

The PUCV'S quantified GHG emissions during the year 2020 correspond to 2,212.51 tonnes of CO2 equivalent. Of these, 80% are generated from sources belonging to scope 2 and 18% to scope 3.

The method used as a basis for calculating the total estimates was the GHG Protocol Corporate Accounting and Reporting Standard. In addition, the principles and requirements set out in NCh-ISO 14064/1:2019 were considered.

### **TOTAL GHG EMISSIONS**

YEAR	PUCV FACILITIES	TONS OF CO2 EQUIVALENT
2019	Total facilities: Valparaíso, Santiago, Viña del Mar, Quilpué and Quillota Scope 1 and 2: 3.209 tons of CO2 equivalent Alcance 3: 1.271 tons of CO2 equivalent	4.481
2020	Total facilities: Valparaíso, Santiago, Viña del Mar, Quilpué and Quillota Scope 1 and 2: 1.815 tons of CO2 equivalent Scope 3: 397 tons of CO2 equivalent	2.212

Source: Curauma Biotechnology Nucleus (NBC), PUCV.

### **GHG EMISSIONES BY SCOPE**

During 2020, emissions associated with electricity consumption represented the University's main source of emissions, followed by emissions from waste management.

The University's GHG emissions intensity was estimated at 1,71, 0,14, 1,33 and 1,55 tons of carbon dioxide equivalent per employee, student, constructed surface area and academic staff, respectively. The decrease in the emission scopes was due to the fact that the pandemic limited the occupation of physical space, resulting in the scarce use of energy resources and transportation offered to the university community.

Of the total calculation of emissions for 2020, 80% corresponds to Scope 2, which represented the source of GHG emissions with the greatest contribution to the PUCV's carbon footprint. Emissions in this scope were estimated at 1,770.93 tCO2e, resulting from electricity consumption during the year corresponding to 4,619,005 kWh, considering all the University's campuses.

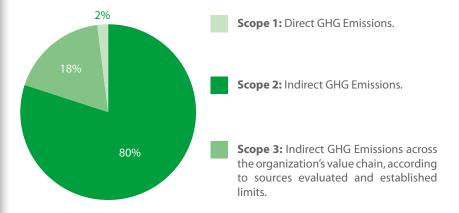
On the other hand, 18% corresponds to Scope 3, where waste treatment and/or disposal contributed 82% of the emissions included in this scope. However, waste recovery and recycling initiatives, such as plastics, cardboard and glass, reduced the impact of this category, reaching a total of 2,493 kg of recycled waste, thus avoiding the generation of 0,66 tonnes of CO2 equivalent during 2020.

Finally, Scope 1 measurement represents 2%, corresponding to emissions from the consumption of fossil fuels, such as petrol, diesel, natural gas and liquefied gas.

### **EMISSIONS BY SCOPE**

YEAR	TONS OF CO2 EQUIVALENT	SCOF	PE (%)
		Scope 1	5,8%
2019 4.482	4.482	Scope 2	65,9%
		Scope 3	28,4%
2020 2.212	Scope 1	2%	
	2.212	Scope 2	80%
		Scope 3	18%

Source: Curauma Biotechnology Nucleus (NBC), PUCV.



### ENERGY CONSUMPTION

In 2020, the University recorded an electricity consumption of 4,619,005 kWh, which represents a reduction of 33,3% compared to 2019.

The reasons for this decrease are explained by the lower occupancy of physical spaces of the University, including classrooms, libraries, casinos, cafeterias, bathrooms, administrative offices, among others, as a result of the pandemic. As a result, for the reported year, the energy intensity index, calculated on the basis of the square metres of total surface area of university facilities, was reduced from 41,5 Kw/m2 in 2019 to 24,9 Kw/m2 in 2020.

In 2020, as part of the project "Strengthening sustainability management in the PUCV", and after an energy audit of the building, all the lighting in the main building was replaced with more energy-efficient LED devices.

In relation to fuel consumption, 2020 saw a decrease of about 50%, due to the low mobility, reaching a consumption of 12,73 m3, related to the vehicles of the Mobilisation Unit.

The increase in diesel consumption of around 3% is explained by the incorporation in this report of nine vehicles that use this product, belonging to the School of Food Sciences and the Experimental Plant. The lower consumption of gas is also due to the lower use of this service.

### **ELECTRICITY CONSUMPTION (KWH)**

2020	2019	20
4.619.005	6.923.166	

Source: Department of Administration, General Direction of Economic and Administrative Matters.

### **FUEL CONSUMPTION (M3)**

	2019	2020
Petrol	30,1	15,26
Diesel	5,1	6,79
Compressed Natural Gas - CNG	63.403	10.388
Liquid Natural Gas - LNG	58.328	11.959,2
Total	121.767	22.369

Source: Department of Administration, General Direction of Economic and Administrative Matters.

The Medical Technology Building located on the Curauma Campus has a series of energy-saving elements such as solar panels, efficient heating systems and LED lighting, which **reduces the carbon footprint by 5.9 tons of CO2 per year.** 

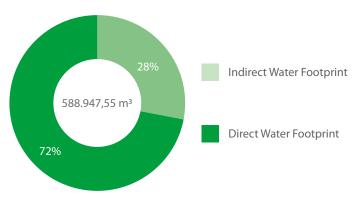
### WATER

In 2020, the University started measuring its water footprint, with the aim of quantifying water consumption and formulating measures to make efficient use of this resource.

The measurement was based on the guidelines of the Water Footprint Assessment Manual created by the Water Footprint Network (WFN), a globally recognised standard. Direct and indirect water consumption resulting from the University's activity was considered, thus incorporating the blue, green and grey water footprints, together with the water uses associated with the purchase of electricity.

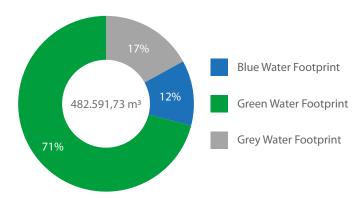
With a total of 35 campuses located in both the Valparaíso Region and the Metropolitan Region, the water footprint quantified for the PUCV during 2020 corresponded to 588,947.55 cubic metres of water, where 72% corresponds to direct consumption and 28% to the indirect water footprint, as a result of the acquisition of the service from Esval and Aguas Andinas.

Based on this determination, the water use intensity was estimated at 353,05 m3 per 100 m2 of surface area corresponding to university infrastructure.



Source: Curauma Biotechnology Nucleus (NBC), PUCV.

The University's direct water footprint was estimated at 482.591,73 m3 of water for the period under evaluation. Of this indicator, 12% corresponds to the blue water footprint, 71% to the green water footprint and 17% to the grey water footprint.



Source: Curauma Biotechnology Nucleus (NBC), PUCV.

<sup>&</sup>lt;sup>1</sup> a.Blue water footprint: measures the consumption of fresh surface and underground water.

b. Green water footprint: measures the rainwater that is evaporated or that does not reach runoff since it has been consumed.

c. Gray water footprint: measures the fresh water that has been contaminated with respect to some previous reference value of the body of water to which it is being reintegrated, as a result of some use or process

### WATER CONSUPTION

In 2020, the consumption of drinking water decreased by 73.425 m3, which represents a drop of 51,9% compared to the previous year, a reduction also explained by the sanitary crisis, which led to the closure of the campuses from March onwards. For the same reason, there was a decrease in groundwater consumption at the Quillota Campus.

### WATER CONSUMPTION M3

	2019	2020
Drinking water (m3)	132.982	63.496
Underground water (m3)	8.497	4.558
Total	141.479	68.054

Source: Department of Administration, General Direction of Economic and Administrative Matters.

At the School of Agronomy, located in Quillota, a Biological Control System has been operating in the water treatment plant since 2013, which degrades septic waste and sewage to recover 100% of it and deposit it in the Quillota community irrigation channel to supply the existing irrigation systems.

In this way, the system attached to the treatment plant has made it possible to increase the volumes of water recycled and recirculated annually, depending on the consumption of the university population.

As a consequence of the lower occupancy of physical spaces for the reasons outlined above, the volume of recycled and recirculated water was also reduced by 960 m3 compared to 2019, representing a decrease of 56,5%..

### **RECYCLES AND RECIRCULATED WATER M3**

2019	2020
1.699	739

Source: Department of Administration, General Direction of Economic and Administrative Matters.

### WASTE **MANAGEMENT**



In terms of waste management, the University has followed a long path. What began in 2005 as a pilot plan at the Central House for the recovery and recycling of waste, such as paper and plastics, over the years has incorporated new materials and added other university premises, guaranteeing their effective management and promoting more conscientious behaviour among members of the university community.

In 2020, 24 clean points for waste segregation at source were purchased and will be installed on the different campuses and sites during 2021.

### **HAZARDOUS WASTE**

The University has a Hazardous Waste Management Plan, authorised by the Health Authority, which is constantly monitored. Dissemination talks are held every year to inform the university community about this plan and the appropriate procedures for the disposal of hazardous waste. However, in 2020, due to the pandemic, these activities were suspended.

The decrease in the amount of hazardous waste disposed of can be explained by the discontinuation of on-site activities and the fact that only some laboratory activities that could not be discontinued were maintained. This can also be explained by an increased awareness of responsible disposal practices in recent years.

### **NON-HAZARDOUS WASTE**

With regard to the Non-Hazardous Waste Management Plan, in 2020 the recycling points were reinforced, mainly at the Curauma Campus, where recycling has been encouraged in the surrounding community, who come to deposit their waste on campus. This explains the increase in the amount of waste collected.

In the case of cigarette butts, no records are kept because the recycling containers were closed due to the suspension of on-site classes.

### **WASTE BY TYPE AND DISPOSAL METHOD (KG)**

Total Hazardous Waste	2019	2020
Total Non-Hazardous Waste	20.385	45.036
Total Waste	46.070	53.527

Source: Department of Administration, General Direction of Economic and Administrative Matters.

### MANAGED HAZARDOUS WASTE

WASTE TYPE	QUANTITY (KILOGRAMS)	
WASTETTPE	2019	2020
Acidic solutions	4.828	1.568
Alkaline solutions	2.370	623
Complex mixtures	0	0
Organic, non-halogenated solvents	3.392	499
Organic, halogenated solvents	16	0
Contaminated containers and glass	1.063	396
Solutions with heavy metals	1.953	390
Solids with heavy metals	249	16
Disused reactives	198	77
Biological	10.238	4.486
Fluorescent tubes	197	42
Batteries	0	0
Pharmaceuticals	30	15
Formalin	381	296
Others: Gases	335	0

Source: Department of Administration, General Direction of Economic and Administrative Matters.

### **MANAGED NON-HAZARDOUS WASTES**

WACTE TVDE	QUANTITY (KILOGRAMS)	
WASTE TYPE	2019	2020
Plastic bottles	978	2.070
Glass	11.200	41.590
Cigarette butts	2,88	0
Household waste	3.760	571,281
Plastic	435	83
Cardboard	4.443	745
Cans	0	60

Source: Department of Administration, General Direction of Economic and Administrative Matters.







The Directorate General of Public Relations has contributed to strengthening the management of this area through a series of mechanisms aimed at focusing on systematic and two-way activities, i.e., activities that contribute to responding to the needs of the environment and, at the same time, provide feedback and strengthen teaching and research.

In this line, in 2020, the socialisation of the institutional guidelines of the area continued, as well as the training and permanent support to the public relations teams in the planning and registration of their initiatives in the Public Relations computer platform.

Throughout the period, the Public Relations Platform registered 3,700 initiatives, the most important of which are: academic outreach activities, entrepreneurship and social innovation and social care and development which, despite the health crisis, were adapted to the virtual format and successfully carried out, allowing continuity to be given to already consolidated programs and also the implementation of new projects.

In the context of its public vocation, the University mobilized a series of actions for the benefit of the community, both with traditional public relations initiatives and a profuse agenda of artistic-cultural activities and courses, as well as through concrete actions to support the community in the face of the health contingency. Thus, our University made available the Molecular Diagnostic Laboratory of Medical Technology and the Laboratory of Aquaculture Pathogens, both of the Faculty of Sciences, to diagnose SARS-COV-2 by PCR, in support of the National Diagnostic Network Covid-19.

### CLINICAL CENTRES

The University's clinics and health care centres offer specialised services to the community, mainly to poor patients, contributing to their wellbeing and quality of life.

In this way, a virtuous link is established between the institution and its environment, because as well as benefiting the community, they are spaces of practice and learning for students, which allow academics to remain linked to the direct exercise of the profession and the needs of society.

The University has five clinical centres, two of them opened in recent years, such as the Centre for Ophthalmological Studies and the Neurological Kinesthetics Centre, which have made it possible to expand the range of medical specialities and the contribution to the health demands of the community.

Despite the circumstances, efforts were made in 2020 to give continuity to the work of the clinical centres through virtual care. As a result, 5,608 consultations were provided.

- Psychology Clinic School of Psychology
- Kinaesthetic Centre School of Kinesiology
- Neurological Kinesiology Centre School of Kinesiology
- Ophthalmologic Examination Centre Medical Technology Career
- Diocesan Polyclinic School of Kinesiology

As an institution of the Church, the PUCV maintains a close relationship of collaboration with the Diocesan Polyclinic of the Bishop of Valparaíso, which provides comprehensive health care to the community of Valparaíso.

### SOCIAL ACTION PROGRAM

Under the coordination of the General Directorate of Public Relations, a social action program has been consolidated, which contributes to the development of vulnerable sectors of Valparaíso, through the active participation of professors and students.

For the development of this program, we work with the La Matriz Corporation, whose purpose is to promote the urban, social, environmental and economic recovery of the Port neighbourhood. Since 2013, more than 40 initiatives have been developed, many of which have remained over time, such as the La Matriz Youth Orchestra, created with the support of the Music Institute, which brings together around 40 children; and the La Matriz Folklore Group, which brings together 30 older adults from the sector.

Despite the context, various projects continued in 2020 and new initiatives were created. The School of Law maintained online services for the La Matriz Legal Clinic, the School of Kinesiology provided care for the elderly and held workshops for children and parents of the Futvalores Program; the School of Journalism conducted a communication diagnosis with neighbourhood organisations; and the School of Computer Engineering developed a mobile application for Radio La Matriz, among other projects that brought together 23 academics and around 70 students from the University.

The MINEDUC's Regional Higher Education project "Strengthening sustainability management", awarded to the PUCV and implemented as of 2020, has strengthened this social connection work, consolidating a program of high impact for the territory and for the University itself, as it connects it with the real needs of the city's inhabitants.

### SOCIAL INCUBATOR

The GEN-E Social Incubator, the first of its kind in Latin America, provides multidisciplinary support to micro-entrepreneurs and promotes social innovation. The incubation process for micro-entrepreneurs is based on the Entrepreneur Cycle, a training program designed by the institution to provide knowledge associated with entrepreneurship management and communication skills.

Moreover, through the Impulsa+ program, the incubator encourages the generation of innovative solutions to social and environmental problems.

As a result of the health context, the Entrepreneur's Cycle and IMPULSA+ were carried out in a virtual format, where new instances of community engagement arose, such as the Entrepreneurship Matinal and Teatime, programs that added up to 34 broadcasts on social networks with more than 1,700 participants and 16,000 reproductions.

Together with the Agency for International Development Cooperation (AGCID), the virtual course "Management of entrepreneurship and social innovation projects from international cooperation" was given, which provided theoretical concepts and internationally validated methodologies that support the development of social entrepreneurship through the challenges proposed by the United Nations 2030 Agenda and its 17 Sustainable Development Goals. In its first version, it had a total of 56 participants from 20 countries.

Another important milestone of the period was the "Third Meeting of Entrepreneurship and Social Innovation", organised by the Directorate of Innovation and Entrepreneurship. The activity, which lasted three days, included the discussion "The importance of social purpose in entrepreneurship", with the participation of Felipe Betancourt, national director of FOSIS; Violeta Sandoval, director of Innovative Social Entrepreneurship in the Western Region of the Monterrey Technological University, and the director of the Social Entrepreneurship and Innovation Department of the Monterrey Technological University.

### INCUBATOR PROJECTS WITH A SUSTAINABILITY SEAL

#### **WORKING GREEN**

### SDG 12 "Responsible Consumption and Production"

Offers healthy and reusable products, recycling take-back services, and workshops on gardening, recycling and entrepreneurship, thus promoting a healthy and environmentally friendly lifestyle.

### **REVALORIZA** (Revalue)

### SDG 12 "Responsible production and consumption"

It offers the management of inert waste produced by construction sites in a sustainable way, promoting the circular economy in the Valparaíso Region. It also promotes the concept of recovery of environmental liabilities, linking all the actors in the chain (generator, transporters, basic recyclers, recycling plants and the community). In addition to recovering materials for the circular industry, other materials are used for social, artistic and community purposes.





### **MARKETBASE**

### SDG 1 "End Poverty" / SDG 17 "Partnerships to achieve the goals"

It consists of a portal where people can join a pre-cooperative and form cooperatives according to the needs of each user, allowing the search for partners, linking with entities of interest and publishing their services as an organisation. Marketbase is a space for the associativity of people focused on improving their quality of life, collectively based on the tools of cooperativism.

### SCHOOL INCUBATOR

The AlCubo PUCV School Incubator promotes and encourages entrepreneurial culture in children and young people with a creative spirit, through two programs: School Entrepreneurship Clubs and Taking Off from the Classroom. The first is aimed at teams of younger students, who develop innovative projects, accompanied by their teachers; while the second supports ventures that are in the incubation and acceleration stages, involving the participation of PUCV academics as mentors.

During 2020, AlCubo held its traditional Entrepreneurial Attitude contest, where it seeks to reward the best pitch in the country. In this version, 33 school students from eight regions participated. Another highlight was the AlCubo Fest International Fair, with the participation of 25 stands of projects incubated in AlCubo and four from Costa Rica. In its two days, it had more than two thousand visits to the website, from 200 countries.

### **ALCUBO SCHOOL INCUBATOR ACTIVITIES 2020**

PROGRAM	INDICATOR	2019	2020
	N° of activities	184	57
Entrepreneurship Clubs	N° of schools	31	14
	N° of workshops	11	10
	N° of activities	48	27
Taking Off from the Classroom	N° of schools	9	9
	N° of workshops	44	53

Source: Department of Innovation and Entrepreneurship.

### **DIE VOLUNTEERING**

The DIE Volunteering program aims to be a space for students from the PUCV and other universities in the region to put into practice their professional and personal skills in the service of the beneficiaries of the support programs for micro-entrepreneurship and social innovation of the Directorate of Innovation and Entrepreneurship.

In 2020, 20 student volunteers, mostly from PUCV, participated in the project.

In order to encourage the development of activities with the environment, carried out by academic units, centres and programs that contribute to strengthening links with the different audiences of interest and, at the same time, enrich and provide feedback for teaching and research, the University has a Competitive Fund for Public Relations.

During 2020, this fund benefited a total of **23 academic units and centres of the PUCV**, which materialised in the awarding of **33 initiatives**, among which the following stand out:

#### **LAW BRIDGES PUCV**

The **Puentes Derecho PUCV (Law Bridges)** project is an initiative of the **School of Law** and its general objective is to link law students with different municipalities of the Valparaíso Region, through the development of two-way legal collaboration, contributing, on the one hand, to the strengthening of the students' training and, on the other hand, to the legal management at the local level.

### **INFORMATICS COMMUNICATES**

The Informatic Communicates project is organised by the **School of Computer Engineering and the La Matriz Corporation**, which consists of developing a two-way, sustainable link between the institutions, through the creation of a website and a mobile application that will strengthen the communicational image of La Matriz Radio and contribute to connecting an excluded territory with the digital world, such as the Barrio Puerto. Internally, the initiative aims to enhance the value and professional learning of the participating undergraduate students.

### WITHOUT CHALK: PLANNING FOR COMMUNITY

Faced with the health crisis caused by the pandemic, the education system was forced to suspend face-to-face classes and, consequently, to implement digital education systems. In this context, and with the aim of guiding parents, teachers and special educators in this new format of education, the PUCV Classroom Study Group, which brings together academics, students and in-service teachers, created "Sin Tiza", a project that consists of twenty video capsules that aim to help children in first grade learn mathematics with the support of their tutors.



### **TECHNICAL COOPERATION**

The University, through its technical cooperation activities, responds to the continuing education, technical assistance and consultancy requirements of state institutions, public and private companies, social organisations and the educational system.

Lifelong learning is one of the areas where the University has a greater presence in society, as a result of the diversity of diploma courses and courses offered, which are in high demand. In 2020, 258 activities of this type were carried out, a lower figure than the previous year, but the number of participants increased, which is explained by the use of virtual platforms that facilitate access. There was also a decrease in technical assistance activities to 58, which is also attributed to the health crisis.

	2019	2020
Resources received through Technical Cooperation (M\$)	7.914.098	5.040.676
Activities with technical assistance	87	58
Academic extension activities	370	258
Students in academic extension activities	10.010	10.107

Source: Department of Technical Cooperation, General Directorate of Public Relations.



ALUMNI

MODALIDAD VIRTUAL

FERIA DE

EMPLEO

PUCV

2020

DESDE EL 26 AL

30 DE OCTUBRE

feriaempleos.pucv.cl

The University understands that the permanent link with its alumni is of great importance for the development of institutional work, as they constitute an effective support network when it comes to evaluating and improving programs and curricula, as well as employability and satisfaction with the information received.

In order to maintain these connections, the PUCV Alumni Network has formal mechanisms for monitoring graduates and carries out activities that allow it to maintain permanent and collaborative relationships with them. Its lines of work include support for labour market insertion, career development and loyalty activities.

Migration to the virtual world, as a result of the health crisis, strengthened links with graduates from different parts of the country and abroad, who took part in its workshops and activities.

During 2020, 35 activities were carried out, with the participation of 3,109 alumni. A large part of these activities focused on supporting job placement, with the seventh version of the Virtual Job Fair, where 61 companies provided exclusive offers for PUCV graduates, arousing the interest of 1,520 applicants. In addition to this, workshops were held for career development, on topics such as leadership and entrepreneurship.

The social networks became a space for meeting with alumni, through the Alumni Interviews cycle, where 36 alumni, based in Chile and abroad, shared their professional experience.

# CULTURAL **EXTENSION**







In the PUCV, artistic and cultural extension is sustained both through the work of schools and institutes, as well as through the unit that promotes its development at the central level.

Faced with the challenge of continuing this work in the context of the health crisis, the Cultural Extension Unit focused its work on the development of meetings through videoconferencing platforms and the generation of audiovisual content, shared on its various social networks. In this way, a rich cultural programme was maintained throughout the year, which constituted a real contribution to mental and spiritual health in times of difficulty.

In the field of music, for the third year, the PUCV Chamber Orchestra was a beneficiary of the Support Program for Professional Orchestras of the Ministry of Arts, Cultures and Heritage, and maintained a virtual presence at the Chamber Music Festival of Chiloé, through its alliance with Codarte Chiloé.

The project developed by the Orchestra for Codelco Andina, sponsor of the Los Andes Children's Symphony Orchestra Foundation (FOSILA), stands out. Through the accompaniment of the performers of the PUCV Orchestra, 65 children from this province resumed their musical activity, after being interrupted by the pandemic.

For its part, in 2020, the Institute of Music premiered the Concert Season "From the Studio", produced with the support of the Centre for Advanced Studies (CEA PUCV) and broadcast on the UCV Television channel.

A milestone for the cultural development of the University was the launch of the book "Conversando Chiloé con Margot Loyola y Osvaldo Cádiz" (Talking about Chiloé), together with the Margot Loyola National Academic of Traditional Culture and Ediciones Universitarias de Valparaíso (EUV), a seal of the PUCV. In addition, other activities included a series of live interviews with Chilean film directors "Conversa conmigo" (Talk to me), a series of talks "Cultura, patrimonio y sociedad" (Culture, heritage and society) and fifty educational videos on folklore and traditional culture.

# ACADEMIC COOPERATION

Due to the pandemic, 2020 was a complex year for the development of international cooperation activities. The restrictions imposed by the governments of most of the countries in the world, the strict sanitary measures marked by quarantines and the cancellation of aeronautical operations, mainly affected student and academic exchange and mobility. Without detriment to this, we persevered in the task of expanding alliances with relevant actors, to continue the process of consolidating International Academic Cooperation, strengthening links with educational institutions, embassies and diplomatic representations to achieve a broader projection of the international work of the PUCV. In this context, 26 agreements were signed with foreign universities and institutions.

In addition, new formats and activities were implemented that brought together a significant number of international actors, using technology and online formats. For example, different online events were organised that allowed a large number of national and international audiences to be reached, with contingent social, cultural and academic themes. In this area, the cycle "PUCV+Internationalisation. Activating Ideas" and the "First International Colloquium on Spanish as a Foreign Language", which together brought together more than 7,000 spectators and participants from the five continents.

Language classes (English, French and Italian) were also offered online, with 307 students. This offer is in addition to the German classes offered by PALE to prepare students for their stay abroad in non-Spanish speaking countries.

During the period, activity began to be generated within the framework of the agreement signed in 2019 with Auckland University of Technology in New Zealand, which includes the "FutureS Pacific" project, a programme of interdisciplinary research and collaboration for future global environments, commitments and impacts.

A new field was also consolidated in the academic offer, with the online delivery of programs designed for the Agency for International Development Cooperation (AGCID); the third version of the International Course on Sustainable Solid Waste Management, which is delivered in collaboration with the Institute of Geography; and the international Spanish courses for professionals from Jamaica, Guyana and Trinidad and Tobago.

# OPEN **PUCV**

Four years after its launch, the PUCV continues to expand its offer of free, massive open online courses (MOOCs), thanks to the "Open PUCV" program, which brings knowledge to a wider public and contributes to the development of knowledge and skills in different areas of knowledge, thus contributing to the achievement of the Sustainable Development Goals (SDGs), specifically SDG 4: "Quality Education" and targets associated with free and accessible knowledge.

The course programs are designed so that everyone, from anywhere in the world, can have access to quality education and that, at the same time, it is delivered in an understandable and universal format, adapted to the needs of today's society, with its wide-ranging opportunities and challenges.

Thus, in 2020, the 13 existing courses had a total of 14,236 enrolments and a total of 939 certified participants. Within this offer, the course "Environmental bioethics: from an unsustainable to a sustainable human way of life", of the Institute of Religious Sciences, stands out.

During 2020, the PUCV stands out nationally and internationally in various rankings that measure the quality of undergraduate and postgraduate teaching, research impact, internationalisation, reputation among employers and public relations.

### **AMÉRICA ECONOMÍA RANKING**

In the América Economía ranking, the University was ranked 4th at the national level, with a quality index of 74,5. In the area of "Community Outreach", the PUCV rose from 11th to 7th place with respect to 2019. In the breakdown of the study, the following undergraduate careers stood out:

### **AMÉRICA ECONOMÍA RANKING 2020**

UNDERGRADUATE DEGREE	RANKIN GPOSITION
Basic Education	2º
Law	3°
Architecture	4º
Journalism	4º
Civil Electronic Engineering/ Civil Electric Engineering	40
Agronomy	6º
Civil Industrial Engineering	7°
Commercial Engineering	8°
Civil Mine Engineering	9°
Psychology	

Source: Department of Administration, General Direction of Economic and Administrative Matters.

### **QUACQUARELLI SYMONDS RANKING (QS)**

The study carried out by the British consultancy firm Quacquarelli Symonds (QS), one of the most prestigious in the world, measures the 400 best universities in Latin America.

In 2020, the University ranked fifth among national universities and 22nd in this ranking, placing it among the best 25 universities in Latin America, standing out in the areas of "academic reputation" and "employer reputation", both with the highest weightings.

### TIMES HIGHER EDUCATION LATIN AMERICA

In the Times Higher Education Latin America 2020 ranking, in which 166 institutions from 13 countries participated, the PUCV maintained its position and was ranked 23rd in Latin America, also keeping the third place at national level.

The PUCV stands out in the top four in the areas of "teaching", "research" and "income to industry", while in "citations of publications" it ranks 21st and 15th in "international perspective".

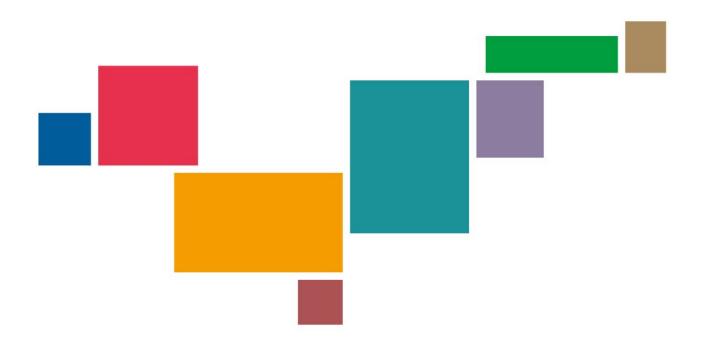
# INSTITUTIONAL **POSITIONING**



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### **SUSTAINABILITY REPORT PUCV 2020**

