Professors, Assistants and Graduate assistants 2025

- Prof. Ing. Franco Simini
- Prof. Adj. Dr. Darío Santos
- Prof. Adj. Ing. Isabel Morales
- Prof. Dr. Javier Hurtado
- Prof. Dr. Francisco Pracca
- Prof. Dr. Oscar Noboa
- Prof. Dr. Gonzalo Ferreira
- Prof. Dr. Marcelo David
- Prof. Agda. Dra. Grazzia Rey

- MSc. Natalia Garay - Assistant
- Br. Alejandra Rial - Graduate assistant
- Lic. Gabriel Maassardjian - Assistant
- Br. Natalia Suárez - Graduate assistant
- Tnlga. Micaela González - Graduate assistant
- Ing. Noely Silva - Graduate assistant
- Bioing. Nicolás Varela- Assistant
- Br. Evangelina Ruiz - Graduate assistant
- Br. Victoria Tabeira - Graduate assistant
- Lic. Rinaldo Almada - Graduate assistant

Administrative support

- Verónica García - Secretary
- Linnette Jara - Website
- Damián Pirez – TICs
- Beatriz González - Infrastructure
- Diana Medina - Secretary

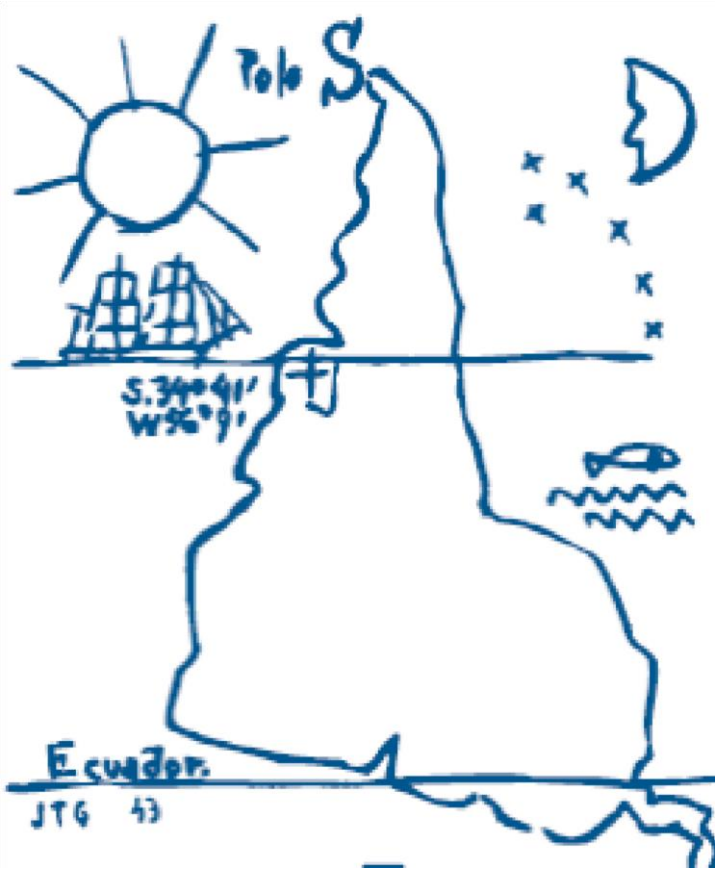
Courses offered by the NIB

- BIOMEDICAL ENGINEERING SEMINAR
- BIOMEDICAL ENGINEERING
- MEDICAL IMAGING: ACQUISITION, INSTRUMENTATION AND MANAGEMENT
- CLINICAL ENGINEERING
- BIOMEDICAL ENGINEERING INTERNSHIP
- ELECTRICITY, ELECTRONICS AND SAFETY IN BIOMEDICAL INSTRUMENTATION
- INFORMATICS AND MEDICAL IMAGING MANAGEMENT / MEDICAL INFORMATICS
- KNEE BIOMECHANICS
- PERINATAL PRACTICES AND APPLICATIONS
- BIOMEDICAL EQUIPMENT AND INFORMATICS IN A GROWING SYMBIOSIS

SEPTEMBER 2025

Núcleo de Ingeniería Biomédica de las Facultades de Medicina e Ingeniería – Av. Italia s/n, Hospital de Clínicas, piso 15 - 11600, Montevideo, Uruguay - tel: +598 1953 Ext. 4406
nib@fmed.edu.uy - www.nib1.fmed.edu.uy

Universidad de la República
Uruguay
nib
núcleo de ingeniería biomédica



FACULTAD DE INGENIERIA
UNIVERSIDAD DE LA REPÚBLICA URUGUAY

NIB most recent projects

DINABANG (2018-2020): Force and lower limb speed in rehabilitation and training.

SIMIC (2019-2021): Informatic System of Heart Failure monitoring

PARKIBIP (2021): Active feedback on gait in people with Parkinson's disease

SEPEPE (2021): Perinatal Personalized Follow up.

IMPETOM (2002-2022): Tomographic reconstruction of thoracic sections using electric impedance

ABDOPRE (2007-2025): Reduction of intra-abdominal pressure

SISENF (2022-2023): Nursing suggestion and recording systems with user participation.

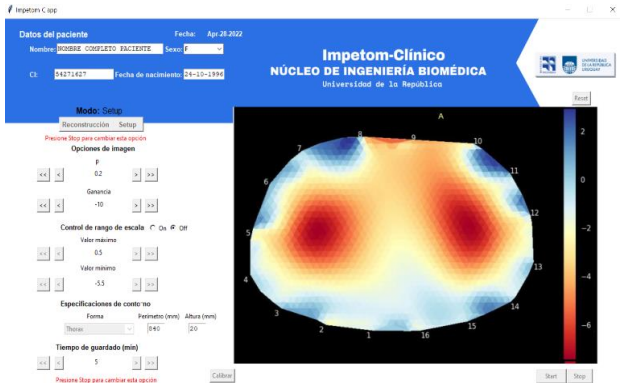
CENEPSIA (2022-2025): Neuromodulation and non-invasive neuroablation with ultrasound.

DIAPODAL (2022-2025): Alert for imminent injury to diabetic foot during gait.

DINABANG-CDA (2024): Training report for footballers in the National Electronic Health Record

DROMBÓ (2025): Healthcare logistics for drone transfers for polyclinics in the department of Tacuarembó.

DINABANG



IMPETOM

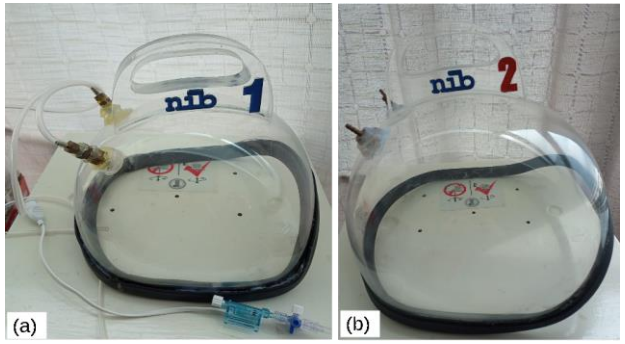


Fig.2: Campanas de descompresión de 14 L (a) y 20 L (b)

ABDOPRE

Technology Transfer

The prototypes developed at the NIB by professors and undergraduate and postgraduate students are part of what constitutes the research lines. It is important that they are used thanks to companies receiving technology transfer.

Extension

VERIPRES (2024-2025): Its objective is to verify domestic blood pressure monitors in Uruguay using the oscillometric method. Measurements are taken under the supervision of a professor and with the voluntary work of previously trained and prepared students. A Fluke Prosim 4 Vital Sign simulator is used for verification, which simulates the blood pressure of a normotensive (120/80 mmHg), hypotensive (60/30 mmHg) and hypertensive (200/150 mmHg) adult individual. Measurements are taken by replacing the user's cuff with another cuff connected to the simulated circuit.

The LATU protocol is applied, which consists of tolerating a maximum average error of ±5 mmHg and a maximum standard deviation of 8 mmHg. According to reproducibility criteria, the average difference between the device and the reference method (mercury sphygmomanometer or calibrated patient simulator) should not exceed 5 mmHg, and variations within measurements (standard deviation) should be kept below 8 mmHg. Meter manufacturers recommend calibrating pressure meters every 2 years.