Professional Master's Degree

Medical Research

tech technological university

tech technological university

Professional Master's Degree
Medical Research

Course Modality: **Online**
Duration: **12 months**
Certificate: **TECH Technological University**
Teaching Hours: **1,500 h.**
Website: **www.techtitute.com/in/nutrition/professional-master-degree/master-medical-research**

Index

01

Introduction

With increasingly universal access to new technologies, it is common for research interest to increase in all fields. In nutrition, vegan and vegetarian diets, consumption of ultra-processed foods or allergies are some of the most frequent topics in scientific papers. Being an expanding field that requires highly trained and updated dietitians, TECH has created this 100% online program, which delves into Medical Research, from the creation of the project to the search for funding, research methodology and dissemination of results in different media. An update with the most complete theoretical, practical and additional syllabus of the current academic scene taught in a flexible, convenient and adaptable format.

Get up to date on the most advanced statistics, delving into R, biostatistics and analytical methodology with which to take your medical nutritional research to a high level"

Research on nutritional issues is not trivial, especially in a society increasingly involved in diets of all kinds, with conditions caused by poor nutrition or an unusual interest in a more careful diet. Nutritionists have a favorable field of action not only to address all these issues in a practical way, but also to investigate them through research that follows the nutritional trends of both the present and the future.

This is where the ability of nutrition professionals come into play to undertake a research project, a complex issue that requires multiple skills and knowledge that, in addition, must be updated to the latest scientific and technological precepts. For this reason, TECH has created this Professional Master's Degree in Medical Research, aimed at providing an overall but at the same time exhaustive view of all the steps to be followed when undertaking a project of this nature.

Thus, the Nutritionist will learn different topics such as collaborative research, treatment of bibliographic and documentary sources or international funding calls, as well as the dissemination of results through reports, articles, conferences and even social networks. A whole appendix of contents that will give an improved, rigorous and current approach to the graduate's research projects.

In addition, the 100& online format of the program, without in-person classes or fixed schedules, allows total compatibility. It is the student who decides when, where and how to learn the entire teaching load, being able to distribute it at his own pace to adapt it to his work or personal responsibilities. Contents are available 24 hours a day from the virtual campus, accessible at any time from a computer, smartphone or device with internet connection.

This **Professional Master's Degree in Medical Research** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Case studies presented by experts in Health Sciences Research
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Invest in one of the research fields with the greatest current projection and obtain all the guarantees to undertake your own project in this Professional Master's Degree"

Learn how the R programming language can become an essential tool in your research, broadening your horizons in biostatistics, biomedical research and Data Mining"

Acquire not only the best tools to collect and process data of all kinds, but also the knowledge to make high-level graphical representations.

All program contents can be downloaded directly to your computer or tablet of choice, providing you with a vital reference guide for your future nutritional research.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

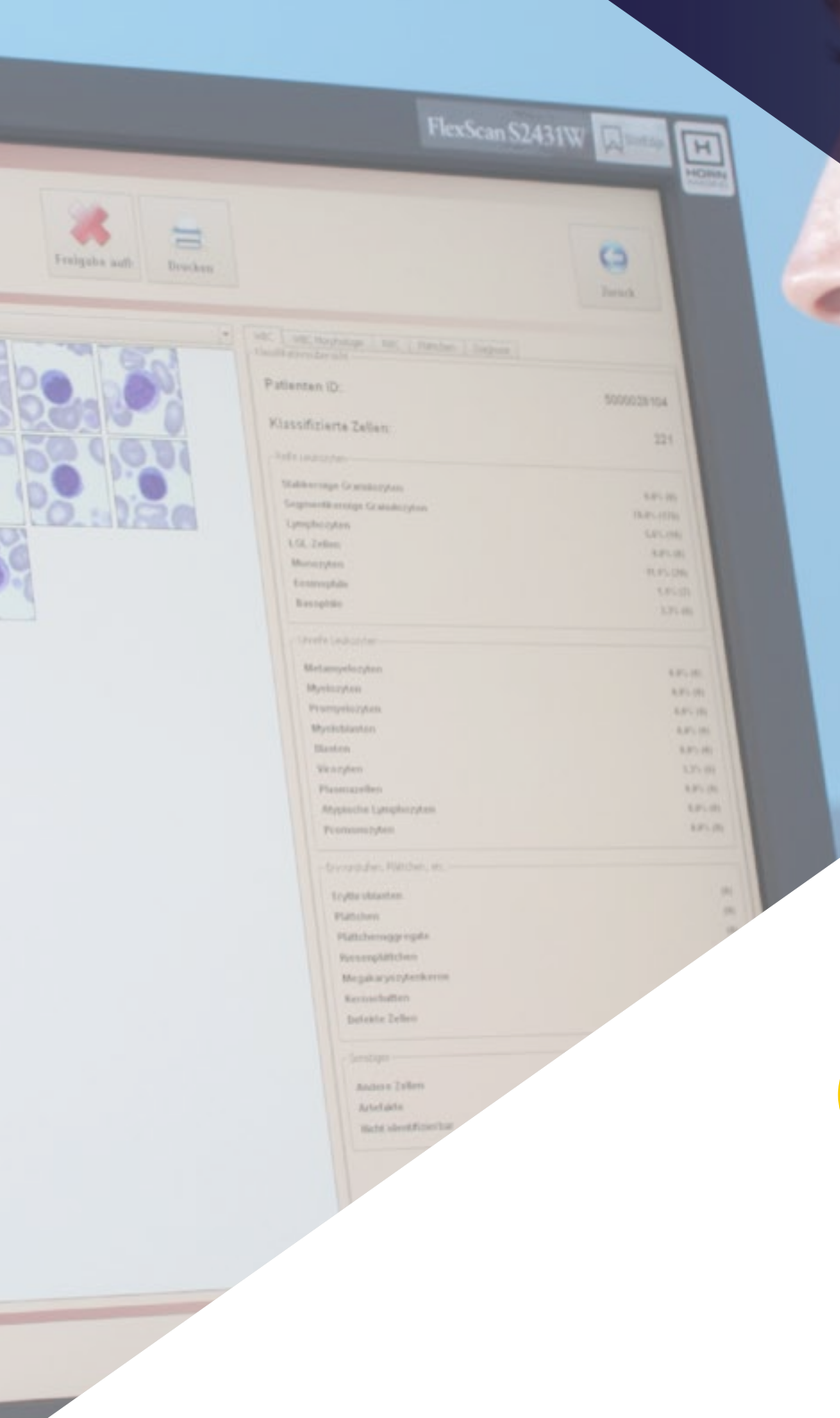
The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year This will be done with the help of an innovative system of interactive videos made by renowned experts.

02

Objectives

As Medical Research is a booming field in the nutritional field, the main objective of this program is to provide nutrition professionals with an exhaustive and detailed knowledge of this field. Thus, they will have a rigorous, up-to-date and current vision of all the steps to take to undertake successful research projects, lead diverse work groups and expose their results in the most prestigious spaces of nutritional and dietetic diffusion.



The future of nutrition involves issues such as the relationship between healthy diets and mental health or eating disorders. Study these topics with rigor and certainty thanks to this Professional Master's Degree"

General Objectives

- Understand the appropriate approach to a question or problem to be solved
- Asses the state of the art of the problem through literature search
- Assess the feasibility of the potential project
- Study the drafting of a project in accordance with the different calls for proposals
- Examine the search for funding
- Master the necessary data analysis tools
- Writing scientific articles (papers) according to the target magazines
- Generate posters relevant to the topics addressed
- Know the tools for dissemination to the non-specialized public
- Delve into data protection
- Understand the transfer of knowledge generated to industry or the clinic
- Examine the current use of artificial intelligence and massive data analysis
- Study examples of successful projects

Specific Objectives

Module 1. The Scientific Method Applied to Health Research. Bibliographic Positioning of the Research

- Become familiar with the scientific method to be followed to carry out health research
- Learn the correct way to ask a question and the methodology to follow to achieve the best possible answer
- Delve into learning how to search for bibliographic methods
- Master all the concepts of scientific activity

Module 2. Generation of Working Groups: Collaborative Research

- Learn how to create working groups
- Create new biomedical research spaces

Module 3. Generation of Research Projects

- Learn how to assess the feasibility of the potential project
- Delve into the essential milestones for writing a research project
- Delve into the criteria for exclusion/inclusion in projects
- Learn how to set up the specific team for each project

Module 4. The clinical trial in health research

- Recognize the main figures involved in clinical trials
- Learn how to generate protocols
- Maintain a good documentation management

Module 5. Project Financing

- Have an in-depth knowledge of the sources of funding
- In-depth knowledge of the different calls for proposals

Module 6. Statistics and R in Health Research

- Describe the main concepts of biostatistics
- Learn how to use the R program
- Define and understand the regression method and multivariate analysis with R
- Recognize the concepts of statistics applied to research
- Describe the statistical techniques of Data Mining
- Provide knowledge of the most commonly used statistical techniques in biomedical research

Module 7. Graphical Representations of Data in Health Research and Other Advanced Analysis

- Obtain in-depth knowledge of dimensionality reduction methods
- Delve into the comparison of methods

Module 8. Dissemination of Results I, Reports, Memos and Scientific Articles

- Learn the various ways of disseminating results
- Internalize how to write reports
- Learn how to write for a specialized journal

Module 9. Dissemination of Results II, Symposiums, Congresses, dissemination to Society

- Learn how to generate a poster at a congress
- Learn how to prepare different communications of different times
- Learning how to turn a scientific paper into dissemination material

Module 10. Protection and Transfer of Results

- Introduction to the world of results protection
- Delve into patents and similar
- You will learn in depth about the possibilities of creating companies

Get all the necessary keys that will take your proposals and projects in the field of nutritional research to a new level"

03

Skills

Modern researchers, especially those dedicated to Medical Research, must have developed and highly perfected skills. The field of Nutrition is no exception, as professionals in the area must be experts in the management of Big Data, various analytical models or protocols and derived ethical aspects. This program focuses, precisely, on the most important skills when it comes to covering different types of dietetic research projects, being able to achieve upon completion a greater mastery of the tools, workspaces and even methods of dissemination most used today.

Expand your research skills and specialize in the generation of nutritional research projects, acquiring expertise in the use of the most advanced tools"

General Skills

- Design and write research projects in health sciences
- Use the information in documentary databases in the field of health sciences for the bibliographic support of a research project
- Perform the processing of the results obtained with statistical tools, massive data analysis and computational statistics
- Manage at an advanced user level statistical packages for the treatment of the information collected in research in the field of health sciences
- Generate graphs from the data obtained in a project
- Disseminate the results
- Perform the appropriate protection/transfer of the data generated
- Make critical and reasoned judgments on the validity and reliability of scientific information in the health field

Specific Skills

- Master the new spaces for health research
- Manage the different phases of clinical trials
- Recognize the main figures involved in clinical trials
- Manage the strategy for participation in international projects
- Generate specific project formats for funding in different calls for proposals
- Explore regression methods applied to research
- Master the tools of computational statistics
- Generate graphs for visual data interpretation of data obtained in research projects
- Manage scientific reports and articles
- Disseminate data obtained to non-specialized audiences
- Learning how to turn a scientific paper into dissemination material
- Value the results of a research project

Give a boost to your career projection in the field of research, enhancing your skills in managing, interpreting and presenting complex nutritional data"

03

Course Management

In order to maintain the highest possible quality in all the proposed contents, TECH has called upon a group of experts in various areas of data processing, health research and team leadership. Therefore, the teaching staff is, a guarantee of the adequacy of all the contents to the highest scientific rigor and timeliness, giving the nutrition professionals not only a theoretical view of this field, but also a practical one, as it includes numerous simulated cases and real examples drawn from the experience of the teaching staff.

You will have at your disposal a direct communication channel with the teaching staff to solve all your doubts and concerns about Medical Research"

Management

Dr. López-Collazo, Eduardo

- Scientific Deputy Director in the Institute for Health Research the Health Research Institute of La Paz University Hospital
- Head of the Department of Inmune Response and Infectious Diseases at IdiPAZ
- Head of the Department of Inmune Response, Tumors and Immunology at IdiPAZ
- President of the IdiPAZ Research Commission
- Sponsor of the External Scientific Committee of the Murcian Institute of Health Research
- Member of the Scientific Commission of FIDE
- Editor of the international scientific journal "Mediators of Inflammation"
- Editor of the international scientific journal "Frontiers of Immunology"
- Coordinator of IdiPAZ Platforms
- Coordinator of Health Research Funds in the areas of Cancer, Infectious Diseases and HIV
- PhD in Nuclear Physics, University of La Habana
- Doctorate in Pharmacy from the Complutense University of Madrid

Professors

Dr. Martín Quirós, Alejandro

- Head for Urgent Pathology of La Paz University Hospital
- Director of the Urgent and Emergent Pathology Research Group of the Research Institute of the University Hospital La Paz
- Secretary of the Teaching Commission of the Research Institute of La Paz University Hospital
- Assistant of Internal Medicine/Infectious Diseases of the High-Level Isolation Unit of the University Hospital La Paz - At Hospital Carlos III
- Internist at Olympia Quirón Hospital

Mr. Arnedo Abade, Luis

- Data & Analyst Manager
- Data Scientist & Analyst Manager in Industrias Arnedo
- Data & Analyst Manager in Boustique Perfumes
- Data Scientist & Analyst Manager in Darecod
- Postgraduate Certificate in Statistics
- Psychology Graduate

Dr. Gómez Campelo, Paloma

- Researcher at the Instituto de Investigación Sanitaria, Hospital Universitario La Paz
- Deputy Technical Director of the Health Research Institute of La Paz University Hospital
- Director of the Biobank of the Health Research Institute of the University Hospital La Paz
- Collaborating Teacher of the Polytechnic University of Catalonia
- Doctorate in Psychology the Complutense University of Madrid
- Degree in Psychology from the Complutense University Madrid

Dr. Pascual Iglesias, Alejandro

- Bioinformatics Platform Coordinator, La Paz Hospital
- Advisor to the COVID-19 Expert Committee of Extremadura
- Researcher in Eduardo López-Collazo's innate immune response research group, Instituto de Investigación Sanitaras University Hospital La Paz
- Researcher in the coronavirus research group of Luis Enjuanes, National Center of Biotechnology CNB-CSIC
- Coordinator of Continuing Education in Bioinformatics, Health Research Institute of the University Hospital La Paz
- Cum Laude Doctor in Molecular Biosciences from the Autonomous University of Madrid
- Degree in Biology Molecular from the University of Salamanca
- Professional Master´s Degree in Cellular and Molecular Physiopathology and Pharmacology from the Universidad of Salamanca

Dr. Avendaño Ortiz, José

- "Sara Borrell" Researcher Foundation for Biomedical Research of the Ramón y Cajal University Hospital (FIBioHRC/IRyCIS)
- Researcher Foundation for Biomedical Research of La Paz University Hospital (FIBHULP/ IdiPAZ)
- Researcher HM Hospitals Foundation (FiHM)
- Graduate in Biomedical Sciences from the University of Lleida
- Master's Degree in pharmacological research from the Autonomous University of Madrid
- PhD in Pharmacology and Physiology from the Autonomous University of Madrid

Dr. del Fresno, Carlos

- Researcher Specialist in Biochemistry, Molecular Biology and Biomedicine
- "Michael Servetus" Researcher. Group Leader, Research Institute of the Hospital la Paz (IdiPAZ)
- Researcher Spanish Association Against Cancer (AECC), National Center for Cardiovascular Research (CNIC- ISCIII)
- Researcher, National Center for Cardiovascular Research (CNIC- ISCIII)
- "Sara Borrel" Researcher, National Biotechnology Center (CNIC - ISCIII)
- PhD in Biochemistry, Molecular Biology and Biomedicine, Autonomous University of Madrid
- Degree in Biology from the Complutense University of Madrid

05

Structure and Content

In order to guarantee maximum efficiency when it comes to studying the teaching load, TECH has ensured that all the contents of this program follow the Relearning. This implies that the most important concepts and key topics on medical research are given repeatedly and progressively throughout the syllabus, resulting in a much more natural learning process. The savings in study hours that this implies, means that the Nutritionists can invest that time in delving into the subjects that generate greater interest, either through the several multimedia contents offered or the further readings provided.

In the virtual campus you will find videos in detail, interactive summaries, further readings and all kinds of audiovisual resources to make your academic experience much more rewarding"

Module 1. The Scientific Method Applied to Health Research. Bibliographic Positioning of the Research

1.1. Definition of the Question or Problem to be Solved
1.2. Bibliographic Positioning of the Question or Problem to be Solved
  1.2.1. Information Search
    Strategies and Keywords Pubmed and Other Repositories of Scientific Articles
  1.2.2. Pubmed and Other Repositories of Scientific Articles
1.3. Treatment of Bibliographic Sources
1.4. Treatment of Documentary Sources
1.5. Advanced Bibliography Search
1.6. Generation of Reference Bases for Multiple Use
1.7. Bibliography Managers
1.8. Extraction of Metadata in Bibliographic Searches
1.9. Definition of the Scientific Methodology to be Followed
  1.9.1. Selection of the Necessary Tools
  1.9.2. Design of Positive and Negative Controls in an Investigation
1.10. Translational Projects and Clinical Trials: Similarities and Differences

Module 2. Generation of Working Groups: Collaborative Research

2.1. Definition of Working Groups
2.2. Formation of Multidisciplinary Teams
2.3. Optimal Distribution of Responsibilities
2.4. Leadership
2.5. Control of Activities Achievement
2.6. Hospital Research Teams
  2.6.1. Clinical Research
  2.6.2. Basic Research
  2.6.3. Translational Research
2.7. Creation of Collaborative Networks for Health Research
2.8. New Spaces for Health Research
  2.8.1. Thematic Networks
2.9. Networked Biomedical Research Centers
2.10. Biobanks of Samples: International Collaborative Research

Module 3. Generation of Research Projects

3.1. General Structure of a Project
3.2. Presentation of Background and Preliminary Data
3.3. Definition of the Hypothesis
3.4. Definition of General and Specific Objectives
3.5. Definition of the Type of Sample, Number and Variables to be Measured
3.6. Establishment of the Scientific Methodology
3.7. Exclusion/Inclusion Criteria in Projects with Human Samples
3.8. Establishment of the Specific Team: Balance and *Expertise*
3.9. Expectations: An Important Element that we Forget
3.10. Budget Generation: a fine Tuning Between the Needs and the Reality of the Call
3.11. Ethical Aspects

Module 4. The Clinical Trial in Health Research

4.1. Types of Clinical Trials (CT)
  4.1.1. Clinical Trials Promoted by the Pharmaceutical Industry
  4.1.2. Independent Clinical Trials
  4.1.3. Drug Replacement
4.2. Phases of CE
4.3. Main Figures Involved in CE5
4.4. Generation of Protocols
  4.4.1. Randomization and Masking
  4.4.2. Non-Inferiority Studies
4.5. Ethical Aspects
4.6. Patient Information Sheet
4.7. Informed Consent
4.8. Good Clinical Practice Criteria
4.9. Drug Research Ethics Committee
4.10. Search for Funding for Clinical Trials
  4.10.1. Public. Main Spanish, European, Latin American and U.S. Agencies
  4.10.2. Private. Main Pharmaceutical Companies

Module 5. Project Financing

5.1. Search for Financing Opportunities
5.2. How to Adjust a Project to the Format of a Call for Proposals?
  5.2.1. Keys to Success
  5.2.2. Positioning, Preparation and Writing
5.3. Public Calls for Proposals. Main European and American Agencies
5.4. Specific European Calls for Proposals
  5.4.1. Horizon 2020 Projects
  5.4.2. Human Resources Mobility
  5.4.3. Madame Curie Program
5.5. Intercontinental Collaboration Calls, Opportunities for International Interaction
5.6. Calls for Collaboration with the United States
5.7. Strategy for Participation in International Projects
  5.7.1. How to Define a Strategy for Participation in International Consortia
  5.7.2. Support and Assistance Structures
5.8. International Scientific Lobbying
  5.8.1. Access and Networking
5.9. Private Calls for Proposals
  5.9.1. Foundations and Funding Organizations for Health Research in Europe and the Americas
  5.9.2. Private Funding Calls for Proposals from U.S. Organizations
5.10. Securing the Loyalty of a Funding Source: Keys to Lasting Financial Support

Module 6. Statistics and R in Health Research

6.1. Biostatistics
  6.1.1. Introduction to The Scientific Method
  6.1.2. Population and Sample. Sampling Measures of Centralization
  6.1.3. Discrete Distributions and Continuous Distributions
  6.1.4. General Outline of Statistical Inference. Inference about a Normal Population Mean. Inference about a General Population Mean
  6.1.5. Introduction to Nonparametric Inference
6.2. Introduction to R
  6.2.1. Basic Features of the Program
  6.2.2. Main Object Types
  6.2.3. Simple Examples of Simulation and Statistical Inference
  6.2.4. Graphs
  6.2.5. Introduction to R Programming
6.3. Regression Methods with R
  6.3.1. Regression Models
  6.3.2. Variable Selection
  6.3.3. Model Diagnosis
  6.3.4. Treatment of Outliers
  6.3.5. Regression Analysis
6.4. Multivariate Analysis with R
  6.4.1. Description of Multivariate Data
  6.4.2. Multivariate Distributions
  6.4.3. Dimension Reduction
  6.4.4. Unsupervised Classification: Cluster Analysis
  6.4.5. Supervised Classification: Discriminant Analysis
6.5. Regression Methods for Research with R
  6.5.1. Generalized Linear Models (GLM): Poisson Regression and Negative Binomial Regression
  6.5.2. Generalized Linear Models (GLM): Logistic and Binomial Regressions
  6.5.3. Poisson and Negative Binomial Regression Inflated by Zeros
  6.5.4. Local Fits and Generalized Additive Models (GAMs)
  6.5.5. Generalized Mixed Models (GLMM) and Generalized Additive Mixed Models (GAMM)
6.6. Statistics Applied to Biomedical Research with R I
  6.6.1. Basic Notions of R. Variables and Objects in R. Data handling. Files Graphs
  6.6.2. Descriptive Statistics and Probability Functions
  6.6.3. Programming and Functions in R
  6.6.4. Contingency Table Analysis
  6.6.5. Basic Inference with Continuous Variables

6.7. Statistics Applied to Biomedical Research with R II
- 6.7.1. Analysis of Variance
- 6.7.2. Correlation Analysis
- 6.7.3. Simple Linear Regression
- 6.7.4. Multiple Linear Regression
- 6.7.5. Logistic Regression

6.8. Statistics Applied to Biomedical Research with R III
- 6.8.1. Confounding Variables and Interactions
- 6.8.2. Construction of a Logistic Regression Model
- 6.8.3. Survival Analysis
- 6.8.4. Cox Regression
- 6.8.5. Predictive Models. ROC Curve Analysis

6.9. Statistical Data Mining Techniques with R I
- 6.9.1. Introduction. Data Mining. Supervised and Unsupervised Learning. Predictive Models. Classification and Regression
- 6.9.2. Descriptive Analysis. Data Pre-Processing
- 6.9.3. Principal Component Analysis (PCA)
- 6.9.4. Cluster Analysis. Hierarchical Methods. K-Means

6.10. Statistical Data Mining Techniques with R II
- 6.10.1. Model Evaluation Measures. Predictive Ability Measures. ROC Curves
- 6.10.2. Models Assessment Techniques. Cross-Validation. Bootstrap Samples
- 6.10.3. Tree-Based Methods (CART)
- 6.10.4. Support Vector Machines (SVM)
- 6.10.5. Random Forest (RF) and Neural Networks (NN)

Module 7. Graphical Representations of Data in Health Research and Other Advanced Analysis

7.1. Types of Graphs
7.2. Survival Analysis
7.3. ROC Curves
7.4. Multivariate Analysis (Types of Multiple Regression)
7.5. Binary Regression Models
7.6. Massive Data Analysis
7.7. Dimensionality Reduction Methods
7.8. Comparison of Methods: PCA, PPCA and KPCA
7.9. T-SNE (t-Distributed Stochastic Neighbor Embedding)
7.10. UMAP (Uniform Manifold Approximation and Projection)

Module 8. Dissemination of Results I, Reports, Memos and Scientific Articles

8.1. Generating a Scientific Report or Memory of a Project
- 8.1.1. Optimal Approach to the Discussion
- 8.1.2. Presentation of the Limitations

8.2. Generation of a Scientific Article: How to Write a Paper on the Basis of the Data Obtained?
- 8.2.1. General Structure
- 8.2.2. Where Does the Paper Go?

8.3. Where to Start?
- 8.3.1. Adequate Representation of the Results

8.4. The Introduction: The Mistake of Starting with this Section
8.5. The Discussion: The Cusp Moment
8.6. The Description of Materials and Methods: The Guaranteed Reproducibility
8.7. Choice of the Journal where the Paper is to be Submitted
- 8.7.1. Choice Strategy
- 8.7.2. Priority List

8.8. Adaptation of the Manuscript to the Different Formats
8.9. The Cover Letter: Concise Presentation of the Study to the Editor
8.10. How to Respond to Reviewers' Doubts? The Rebuttal Letter

Module 9. Dissemination of Results II: Symposia, Congresses, Dissemination to Society

9.1. Presentation of Results at Congresses and Symposia
- 9.1.1. How is a Poster Generated?
- 9.1.2. Data Representation
- 9.1.3. Focusing the Message

9.2. Short Communications
- 9.2.1. Data Representation for Short Communications
- 9.2.2. Focusing the Message

9.3. The Plenary Lecture: Notes on How to Keep the Attention of the Specialized Audience for More than 20 Minutes

9.4. Dissemination to the General Public
- 9.4.1. Need Vs. Opportunity
- 9.4.2. Use of References

9.5. Use of Social Networks for the Dissemination of Results

9.6. How to Adapt Scientific Data to the Popular Language?

9.7. Hints for Summarizing a Scientific Paper in a Few Characters
- 9.7.1. Instant Dissemination via Twitter

9.8. How to turn a Scientific Paper into a Popularization Material
- 9.8.1. Podcast
- 9.8.2. YouTube Videos
- 9.8.3. Tik Tok
- 9.8.4. Comics

9.9. Popular Literature
- 9.9.1. Columns
- 9.9.2. Books

Module 10. Protection and Transfer of Results

10.1. Protection of Results: General Aspects

10.2. Valorization of the Results of a Research Project

10.3. Patents: Pros and Cons

10.4. Other Forms of Protection of Results

10.5. Transfer of Results to Clinical Practice

10.6. Transfer of Results to Industry

10.7. The Technology Transfer Contract

10.8. Trade Secrets

10.9. Generation of Spin-Off Companies from a Research Project

10.10. Search for Investment Opportunities in Spin-Off Companies

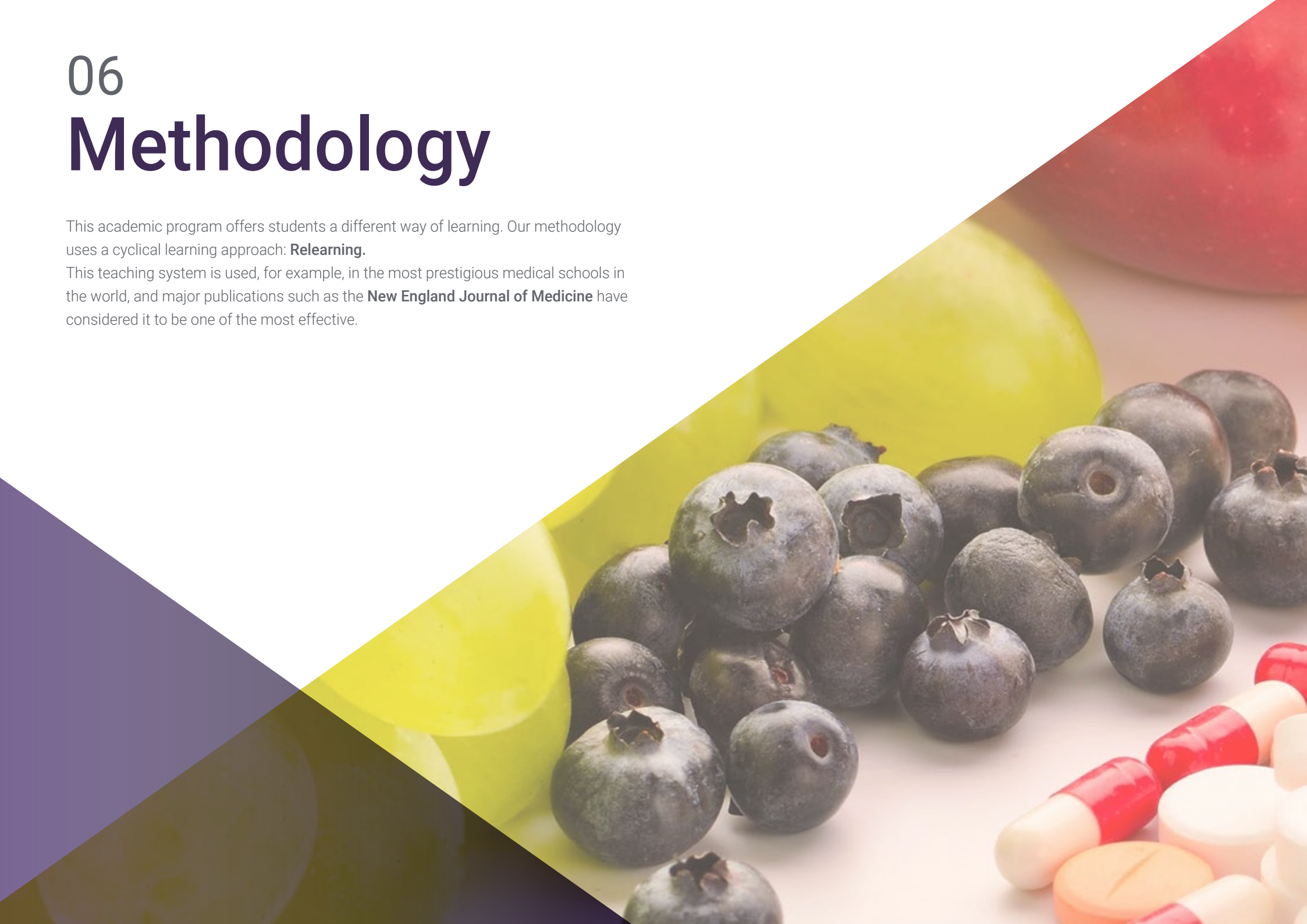
The self-knowledge exercises and self-assessment tests will help you to reinforce your knowledge effectively in each module of the program"

06

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

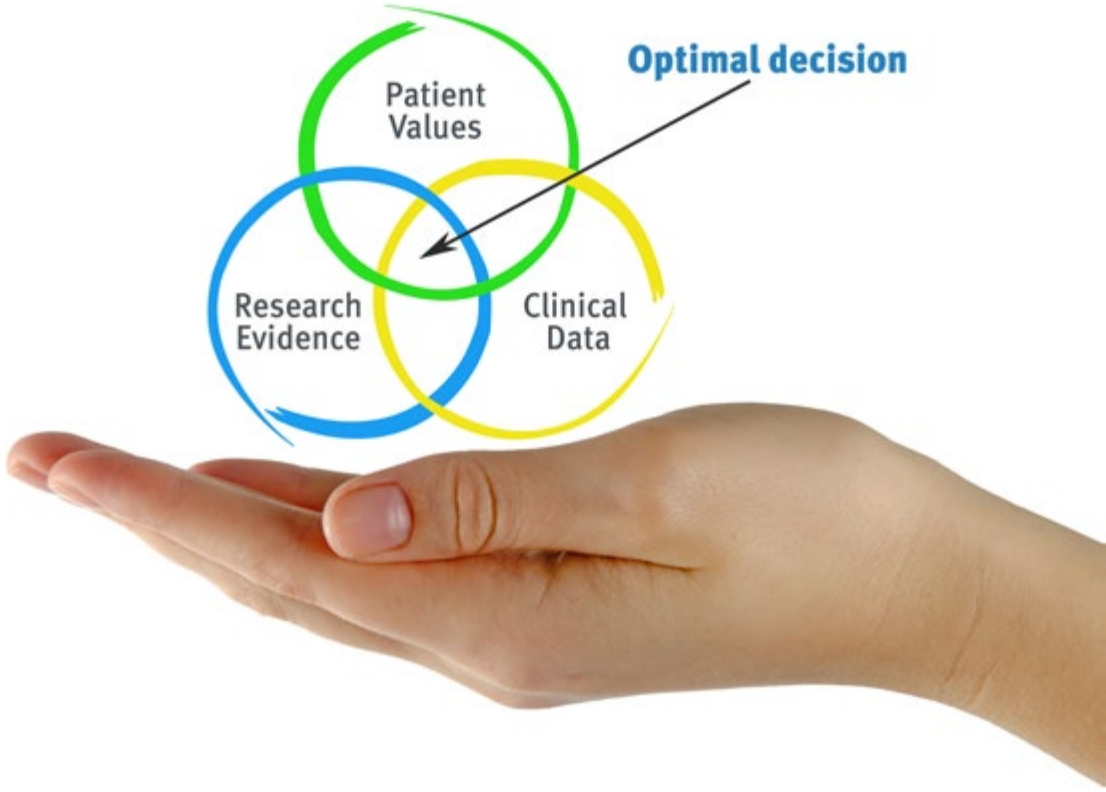


Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH, nutritionists can experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions of professional nutritional practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

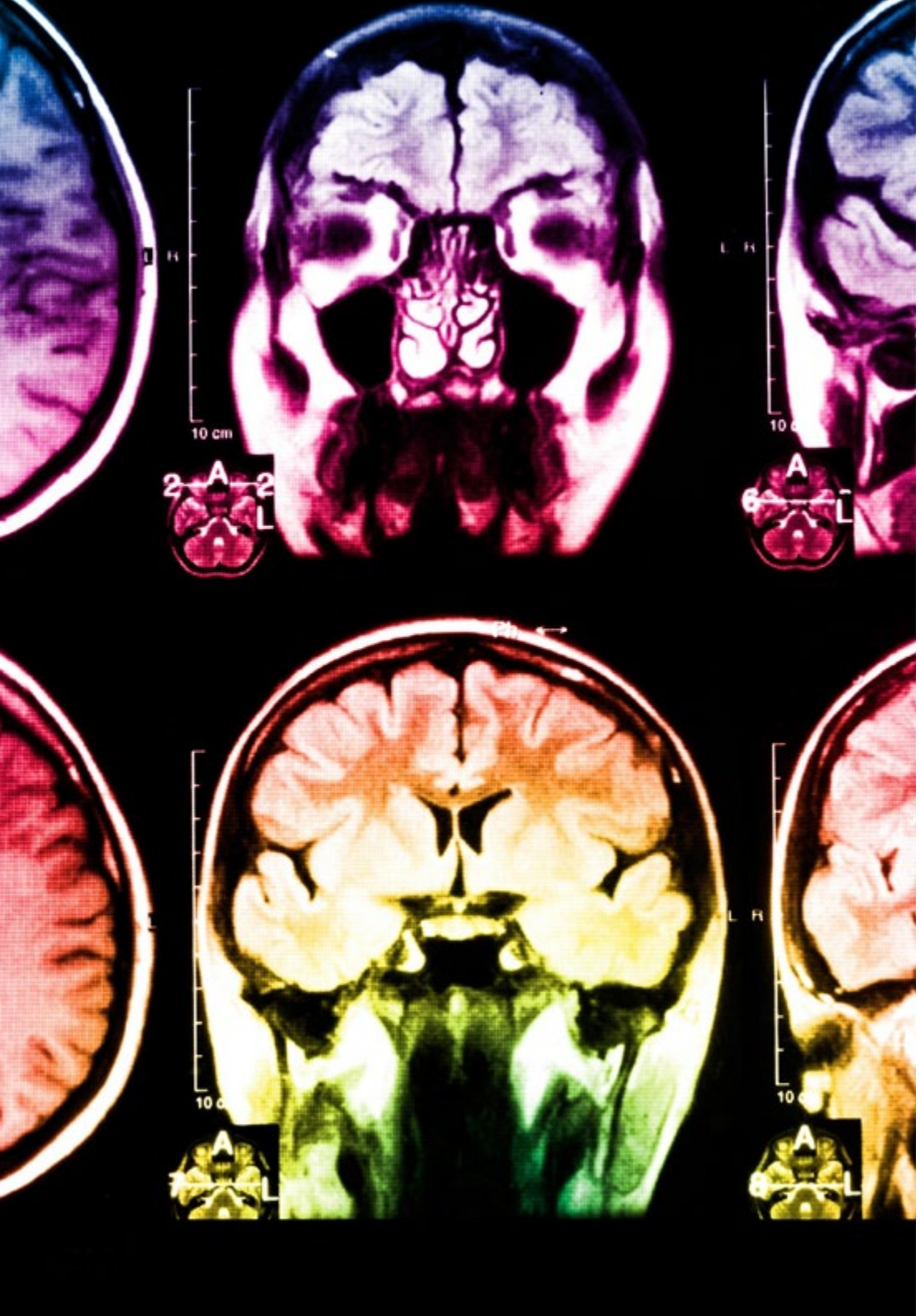
1. Nutritionists who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the nutritionist to better integrate knowledge into clinical practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

The nutritionist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 45,000 nutritionists have been trained with unprecedented success in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Nutrition Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current nutritional counselling techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

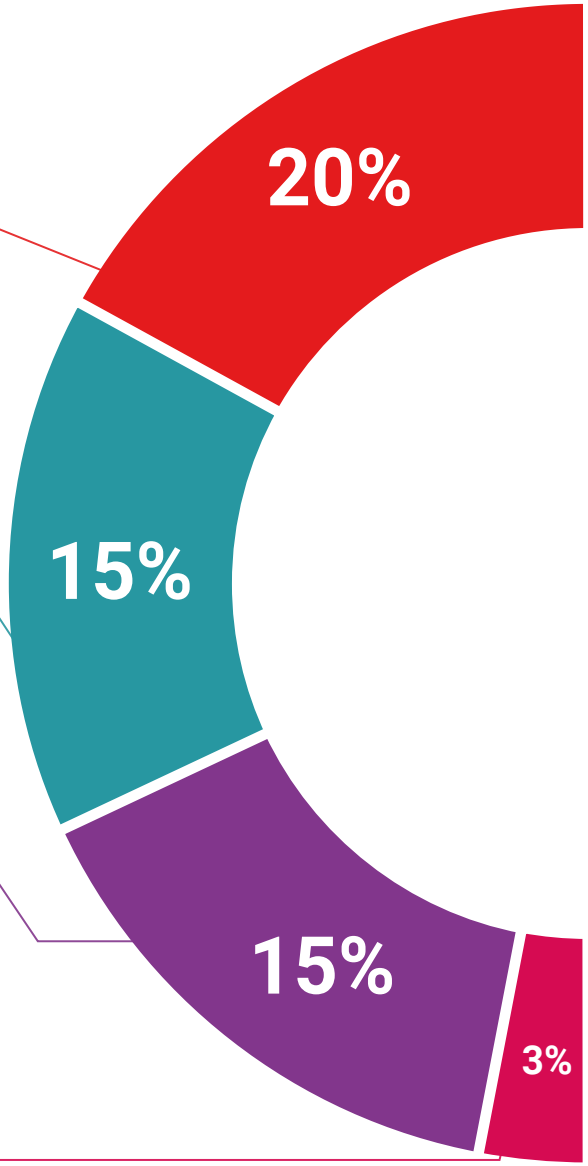
Interactive Summaries

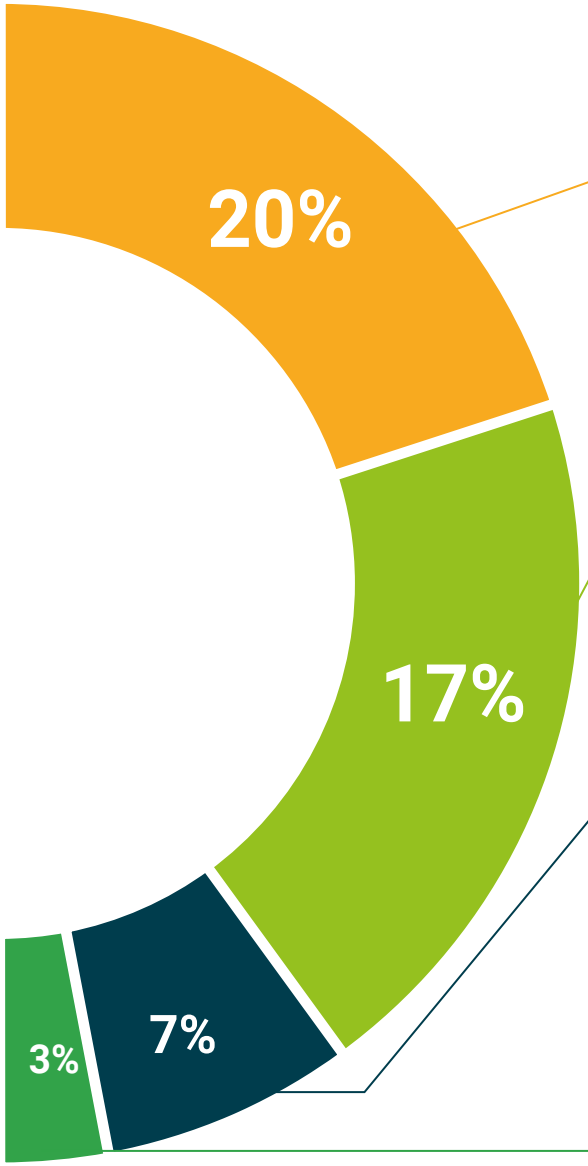
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

07

Certificate

The Professional Master's Degree in Medical Research guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This **Professional Master's Degree in Medical Research** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by TECH Technological University via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Medical Research**

Official Nº of Hours: **1,500 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having successfully passed and accredited the following program

PROFESSIONAL MASTER'S DEGREE

in

Medical Research

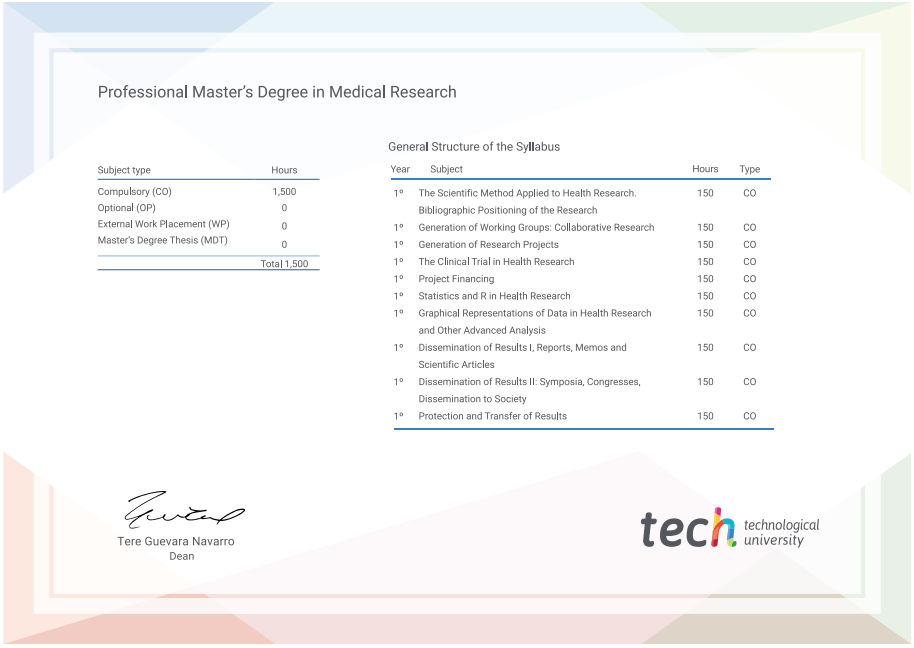
This is a qualification awarded by this University, equivalent to 1,500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates


Professional Master's Degree in Medical Research

Subject type	Hours
Compulsory (CO)	1,500
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
	Total 1,500

General Structure of the Syllabus

Year	Subject	Hours	Type
1º	The Scientific Method Applied to Health Research. Bibliographic Positioning of the Research	150	CO
1º	Generation of Working Groups: Collaborative Research	150	CO
1º	Generation of Research Projects	150	CO
1º	The Clinical Trial in Health Research	150	CO
1º	Project Financing	150	CO
1º	Statistics and R in Health Research	150	CO
1º	Graphical Representations of Data in Health Research and Other Advanced Analysis	150	CO
1º	Dissemination of Results I, Reports, Memos and Scientific Articles	150	CO
1º	Dissemination of Results II: Symposia, Congresses, Dissemination to Society	150	CO
1º	Protection and Transfer of Results	150	CO

Tere Guevara Navarro
Dean

tech technological university

*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

tech technological university

Professional Master's Degree

Medical Research

Course Modality: **Online**

Duration: **12 months**

Certificate: **TECH Technological University**

Teaching Hours: **1,500 h.**

Professional Master's Degree

Medical Research

tech technological university