Professional Master's Degree
Medical Affairs

tech technological university

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Professional Master's Degree
Medical Affairs

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/pk/medicine/professional-master-degree/master-medical-affairs**

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01

Introduction

In recent years, new technologies and investment in research in the pharmaceutical industry have significantly boosted the Medical Affairs department. Their role is becoming increasingly important in any pharmaceutical, biotechnology or medical company, given their role in providing information on treatment advances. A role that requires scientific knowledge and highly honed communication and leadership skills. In this regard, TECH has created this program, which offers medical professionals the most relevant and innovative information on this profile, access to medicines in the 21st century, health economics and outcomes research, among other aspects of great interest. All this through a 100% online degree with content developed by an extensive teaching team composed of experts with extensive experience in the pharmaceutical industry.

This Professional Master's Degree will give you during 12 months the keys, techniques and essential tools of the professional profile Medical Affairs"

As well as high turnover figures and the generation of direct and indirect wealth, the pharmaceutical industry currently has a great impact on the welfare state. In this scenario, the *Medical Affairs*, department has gained vital importance in recent years, where professionals must carry out an exquisite task of providing information on the latest developments in treatments with a medical approach, within a framework of generalized sustainability.

The numerous studies to which drugs are subjected, which must be interpreted and communicated to healthcare personnel for their correct use and sale, mean that the staff of the medical department or *Medical Affairs* must also possess excellent technical and scientific skills and knowledge in order to achieve a relationship of trust and credibility with opinion leaders and other healthcare professionals. Therefore, given that these profiles are increasingly in demand by companies and at the same time that the configuration of these areas as strategic pillars of the pharmaceutical industry, together with R&D and sales, is becoming more relevant, TECH has designed this Professional Master's Degree in Medical Affairs.

A program taught exclusively online, which will take the medical specialist over 1,500 teaching hours to delve into the techniques most commonly used by professionals who make up the Medical Affairs, department, statistical tools, the most effective methods in literature searches, scientific evidence, necessary to conduct drug research studies.

All this will be possible thanks to innovative teaching resources (video summaries, *in focus*) videos), essential readings, case simulations, to which you will have access 24 hours a day, from any electronic device with an Internet connection.

This academic institution thus provides a flexible university degree, which can be comfortably studied by the professional. With no classroom attendance or fixed class schedules, students also have the possibility of distributing the course load according to their needs, making this online program an excellent opportunity for those who wish to combine the most demanding responsibilities with a Professional Master's Degree.

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

- The development of case studies presented by experts in medicine and the pharmaceutical industry
- 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

Access 24 hours a day, 7 days a week to the multimedia resource library of this quality university program"

A flexible academic option that adapts to you. No presence, no fixed classes, you only need a computer with internet connection to visualize the syllabus"

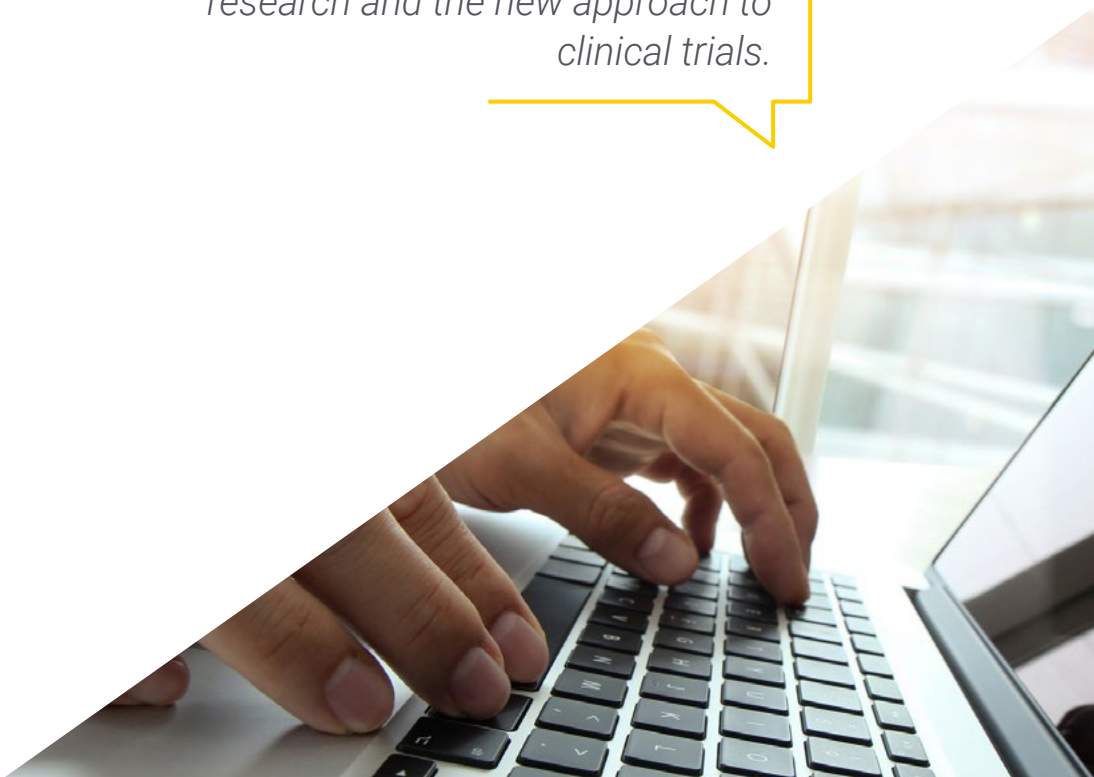
With this program you will be able to delve into pharmacoeconomics and the economic evaluation of a drug through multimedia resources.

With this university program, you will be aware of the future of clinical trial research and the new approach to clinical trials.

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

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive education programmed to prepare 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 For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

Objectives

This Professional Master's Degree offers the professional a vision of the future of the *Medical Affairs* profession. For this purpose, the specialist will learn the latest news about this department in the new pharmaceutical industry, the requirements currently requested by the main companies, as well as the leadership skills, information search and relationship between teams, necessary to carry out the work successfully. All this also provides differentiating elements, which are currently widely demanded by the sector.

This Professional Master's Degree will show you the latest techniques to use medical medical information as a strategy to update the medical team"

General Objectives

- Assimilate the scientific-technical knowledge that allows to perform the functions in the department of *Medical Affairs*
- Know in depth the relationship between the MSL and the *Medical Advisor* with the rest of the departments
- Analyze and learn about different structures of *Medical Affairs* departments
- Train the professional, through the necessary skills, to improve problem solving and develop essential professional competencies
- Gain in-depth knowledge of new projects of value for the pharmaceutical industry, such as *Lean* methodology and digital transformation
- Show the vision of hospital pharmacy as a collaborative research agent
- Gain in-depth knowledge of the latest research support tools
- Develop actions and initiatives that improve health outcomes, in collaboration with physicians, industry personnel and health departments
- Develop skills in scientific communication to train and inform other departments and improve the relationship with the physician and patient
- Train the professional in the critical reading of articles and in evidence management
- Design effective leadership strategies in work teams and with other departments
- Train the professional in conflict resolution in the workplace
- Implementing emotional intelligence in the pharmaceutical industry sector
- Interpret the priorities of the pharmaceutical company and establish cooperation with health institutions, understanding the strategic competencies of the medical department, within the ethical framework
- Manage scientific databases for carrying out reviews and bibliographic searches of scientific studies
- Use medical information as a strategy for updating the medical team
- Train the practitioner to communicate medical information to the patient and the health professional

This 100% online program will immerse you in the latest developments in digital transformation in Medical Affairs"

Specific Objectives

Module 1. The drug access environment in the 21st century

- Describe the most relevant characteristics of the current changing environment that condition the pharmaceutical industry and health care systems
- Understand the challenges of the industry in the innovation of new treatments and in the access to the drug market access to the drug market
- Investigate the benefits of public-private partnerships to address challenges
- Identify the different types of relationships between the industry and its *Stakeholders* with their different interests
- Recognize the different types of companies related to the pharmaceutical industry
- Simulate a drug regulation system
- Define the different types of pharmaceuticals and their approach strategy to different customers

Module 2. Medical affairs Department

- Describe the characteristics of the structure and functions of a *Medical Affairs* department
- Investigate models of the relationship between the medical affairs department and the rest of the departments of the pharmaceutical industry
- Recognize the different roles within the *Medical Affairs* department
- Simulate a medical plan and a product plan
- Define the integral communication plan
- Design RWE studies
- Recognize the importance of *Compliance* in the medical affairs department

Module 3. What is the reason for a *Medical Affairs* department? Its reason for being

- Knowing the new role of the pharmaceutical industry since the emergence and development of *Medical Affairs* departments
- Investigate the future expectations of the medical affairs department as a co-creator in research, relationships with institutions, physicians and patients
- Recognize the various commitments of the pharmaceutical industry to patients and to the sustainability of the system without undermining quality
- Simulate scientific communication and professional development, with the design of the career plan
- Describe clinical trials, their types, phases and the objective of each phase
- Define human drug research, its types, its ethical foundations
- Learn about the future of clinical trial research, the new approach to clinical trials

Module 4. *Market Access, Health Economics & Outcomes Research*

- Understand the basic concepts of pharmaeconomics and the economic evaluation of a drug
- Investigate why and what it is used for in health decision making
- Recognize the different methodologies of HTA assessment
- Simulate the measurement and estimation of health outcomes
- Describe the most relevant features of *Market Access*
- Recreate a market access strategy for a medicine
- Describe different drug financing models
- Recognize the importance of measuring health outcomes from an industry perspective
- Recognize a correct economic evaluation of a medicine

Module 5. Vision from hospital pharmacy, clinical research and new tools to investigate and new tools for research

- Describe the characteristics, structure and functions of a hospital pharmacy
- Investigate the role of the hospital pharmacist in terms of access and positioning and selection of medicines in the hospital
- Learn about the new models of patient follow-up by telepharmacy
- Define the Safety in the Use of Medicines
- Recognize the importance of medication safety and medication error reporting
- Recognize the organizational structure of a hospital center
- Simulate an incident reporting system
- Knowing the importance of vaccines and their necessity
- Define the benefits of general vaccination
- Recognize risk groups and risk situations for the use of vaccines
- Learn new ways of research with the use of latest generation software
- Describe the sound data as the basis for the truthful investigation
- Recognize new technologies applied to health data management

Module 6. New value projects of the pharmaceutical industry. Digital Transformation in *Medical Affairs*

- Describe the most relevant characteristics of change management in the health care environment
- Learn about Lean methodology in health care
- Research organizational transformation models
- Recognize organizational culture
- Simulate an organizational change
- Define digital transformation in *Medical Affairs*
- Recognize the educational strategy and define its objective

- Investigate how to measure the implementation of the strategy
- Evaluate the strategy based on indicators
- Define *Agile Mindset*
- Use predictive analytics as a tool for decision making
- Design a training plan for opinion leaders

Module 7. Statistics and R

- Describe the main concepts of biostatistics
- Learn how to use the R program
- Define and understand the regression method and multivariate analysis with R
- Explore regression methods applied to research
- 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 8. Professional competencies to work in *Medical Affairs*

- Acquire the necessary knowledge to speak in public effectively
- Manage emotions in conflict situations
- Describe the most relevant characteristics of the negotiation process
- Know the importance of personal branding and what it brings to the table
- Research models of adaptation to change
- Recognize problems, understand them, know their causes in order to solve them
- Simulate the management of a team
- Know the importance of time management and use time management tools
- Describe and learn about the labor market insertion process Know the tools to define to define the professional goal

Module 9. Clinical Practice Guidelines. *Real Word Evidence* Critical Reading of Articles

- Learn about the evaluation of health technologies
- Define evidence-based Clinical Practice Guidelines (CPGs)
- Describe the sources of quality of the CPGs
- Investigate models of patient inclusion in the development of CPGs
- Recognize the need for shared decision-making tools to assist in making decisions
- Simulating the evaluation of a CPG with an AGREE instrument
- Define *Real Word Evidence*
- Learn about Artificial Intelligence as an aid to generate evidence
- Recognize the importance of critical reading of scientific articles
- Identify the tools for critical reading
- Know the statistical parameters and the clinical trial
- Simulate systematic reviews
- Describe and learn about new forms of electronic medical education

Module 10. *Medical Information*

- Know the organization of the bibliographic search process
- Describe the most relevant sources or resources of information in biomedicine
- Define concepts to establish the search strategy
- Simulate bibliographic searches in Pubmed
- Define the search peer review process
- Knowledge of verbal and written communication of medical information to the practitioner
- Define and understand the concepts of *Off-Label* medical information
- Learn about medical information management for *Medical Affairs*
- Define the concepts of *Medical Insights*
- Research Data Mining and *Data Mining*

03

Skills

One of the main objectives of this academic institution when developing this Professional Master's Degree was to provide the necessary knowledge for professionals to enhance their competencies as *Medical Affairs*. Based on this philosophy, this degree includes a syllabus with a theoretical vision, but at the same time practical thanks to the case studies provided by expert professors. This brings the specialists closer to real situations, whose techniques and methodologies they will be able to successfully integrate in their daily work.

The case study simulations will be very useful for professionals, who will be able to integrate the methodologies in their daily"

General Skills

- Be able to carry out the integration and performance of the work in a Medical Affairs department of any pharmaceutical company
- Assess the new trends that professionals in this sector will encounter now and in the future
- Use statistical tools to support scientific research
- Understand the research process through clinical trials
- Analyze the most recent trends in the pharmaceutical industry
- Improve the communication of medical information to the patient

Specific Skills

- Apply health outcomes in clinical practice from the hospital's point of view
- Know the market access strategies
- Master the tools for goal-oriented leadership development
- Recognize the need for ethics and bioethics in the pharmaceutical industry

With this program you will be able to enhance your communication and leadership skills in pharmaceutical companies that require Medical Affairs"

04

Course Management

In its maxim of offering a quality university education within the reach of all its students, this academic institution has carefully selected the team of professionals who teach this Professional Master's Degree. In this way, the specialist who enters this program will have the knowledge of managers, Medical Affairs and experts in technological areas, which have been poured into the syllabus of this program. In addition, the proximity of the faculty will allow you to resolve any questions that may arise about the content throughout the 12 months of this Instruction

TECH has brought together in this degree a team of professionals with extensive experience in multinational companies in the pharmaceutical industry"

Management

Dr. Cuchí Alfaro, Miguel Ignacio

- Medical Director of Hospital Universitario Puerta de Hierro Majadahonda in Spain
- Medical Coordinator of Hospital Audits in the Madrid Service
- Deputy Manager of the Ramón y Cajal University Hospital of Madrid
- Deputy Medical Director of the Ramón y Cajal University Hospital of Madrid
- Degree in Medicine

Professors

Ms. Susanna, Gabriela

- Medical Advisor Novartis
- MBA Pharma & Biotech, Esame Pharmaceutical Business School, Madrid
- Master's Degree in Virology Complutense University, Madrid
- Degree in Veterinary Medicine from the Complutense University Madrid

Ms. Fernández Soberón, Silvia

- Price & Reimbursement & HEOR Senior Specialist at Merck
- Master's Degree in Clinical Research and Pharmaceutical Medicine EPHOS
- Master's Degree in Health Evaluation and Market Access by Universidad Carlos III

Ms. Gómez Carballo, Natalia

- Health Economics & Market Access Manager UCB Pharma
- MBA's Degree in Pharmaceutical Industry and biotechnology EPHOS EPHOS
- Master's Degree in Health Evaluation and Market Access by Universidad Carlos II

Mr. Arnedo Abade, Luis

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

Mr. Hernández Terciado, Carlos
- Pharmacist at Puerta del Hierro University Hospital, Majadahonda
- Researcher and specialist in the of Antibiotics study
- Degree in Pharmacy from the University of Salamanca

Mr. Alcaraz López, Juan Ignacio
- Pharmacist at Puerta del Hierro University Hospital, Majadahonda
- Pharmacology Researcher
- Graduated in Pharmacy from the Complutense University of Madrid

Ms. Gumiel Baena, Inés
- Pharmacist at Puerta del Hierro University Hospital, Majadahonda
- Master's Degree in Medical Devices from the University of Granada
- Hospital Pharmacy Specialist at the Puerta de Hierro Majadahonda University Hospital
- Graduate in Pharmacy from the Complutense University of Madrid

Ms. Armendáriz Patier, Lucía
- Researcher at the Biomedical Research Foundation of the Puerta de Hierro University Hospital in Spain
- Master in Management and Monitoring of Clinical Trials by TECH Technological University
- Degree in Pharmacy from the Complutense University of Madrid

Ms. Lozano Llano, Carla
- Pharmacist at Puerta del Hierro University Hospital, Majadahonda
- Assistant Pharmacy Technician
- Degree in Pharmacy from the Complutense University of Madrid

Ms. De Santiago Álvarez, Raquel
- Pharmacist at Puerta del Hierro University Hospital, Majadahonda
- Master's Degree Own in Pharmaceutical Oncology by the University of Valencia
- Degree in Pharmacy from the Complutense University of Madrid

Dr. Gracia Sanromán, Javier
- Head of Preventive Medicine at MD Anderson Cancer Center Madrid
- Master's Degree in Total Quality from the Universidad Politécnica de Madrid, a Master's Degree in Health Services Management from the Universidad de Alcalá de Henares
- Specialist in Preventive Medicine and Public Health, Hospital Universitario La Paz
- Degree in Medicine from the Autonomous University Madrid

Mr. Jiménez Alonso, Carlos
- Academics Executive Leader at General Electric Healthcare
- Industrial Engineer from ICAI
- Director of Strategic Solutions and Projects at General Electric Healthcare
- Director of Services at Dräger Medical Iberia
- Regional Head of Services at Dräger Medical Iberia
- Development Engineer at Veolia

Mr. González Francisco, Alfredo
- Senior Account Manager at SOAINT, IT Consulting Company
- Senior Business Strategy and Innovation Consultant at CEGOS, a Consulting, Learning and Competence Development Company
- Business Director at Woork Smart Business Solutions
- Senior Account Manager in the public sector

Ms. Mateos Haro, Miriam
- Researcher in clinical epidemiology at the Clinical Biostatistics Unit of the Ramón y Cajal Institute for Health Research (IRYCIS)
- Specialised's Degree in Virology from the Complutense University of Madrid(UCM
- Graduate in Biology with a major in Health Biology

Ms. Álvarez Díaz, Noelia
- Head of Libraries, university Ramón y Cajal Hospital
- Specialization Diploma in Management of Information Sources and Scientific Innovation
- Online Master in Digital Documentation
- Degree in Documentation from Carlos III University of Madrid
- Diploma in Library and Information from the Complutense University of Madrid

Ruiz López, Francisco
- Head of PSP EMEA at Merck
- MBA in Pharmaceutical Business organized by the Escuela Superior de Organización Farmacéutica (EPHOS)
- Expert in Orthopedics from the Complutense University of Madrid
- Degree in Pharmacy from the Complutense University of Madrid

Ms. Mota Megía, Noelia
- *Medical Affairs* Strategy & Operations at Merck
- Production Specialist at Merck
- Master's Degree in Medical Affairs, Medical Advisor and Medical Scientific Liaison by the European University (EU)

D. Ayuso Sacido, Ángel
- Director of the Brain Tumors Laboratory UFV-FV
- Production Specialist at Merck
- Degree in Biological Sciences in the Autonomous University of Madrid

Dr. Díaz Pollán, Conception
- Senior Regulatory Affairs Specialist
- PhD in Chemical Sciences and Specialist in Quality Control from the Universidad Autónoma de Madrid
- Degree in Pharmacy from the Complutense University of Madrid

Dr. De los Santos Real, Heidi
- Manager of Pricing Strategy and Pharmacoeconomics at Merck Spain
- Doctorate in Pharmacy from the Complutense University of Madrid
- MBA in Management of Pharmaceutical Companies by EPHOS-Universidad Alcalá de Henares, Madrid
- Master's Degree in Development, Registration and Regulation of Medicines in the European Union Universidad Autónoma de Barcelona
- Master's Degree in European Regulation by the College of Pharmacists of Madrid

Dr. Díez Merchán, Irene
- Medical Affairs Director at FAES Farma
- Medical Business Development Manager at FAES Farma
- Degree in Medicine from the Autonomous University Madrid
- Specialist in Pulmonology, Gregorio Marañón General University Hospital

Dr. Lobrera Mozo, Juan

- Medical and Regulatory Affairs Director, Ipsen Pharma Iberia
- Specialist in Clinical Microbiology and Parasitology at Hospital Puerta de Hierro Majadahonda in Spain
- Graduate in Medicine and Surgery from the Universidad de Navarra

Ms. Ferreira de Campos, Karine

- Medical Affairs at Merks
- Master's Degree in Clinical Research and Pharmaceutical Medicine from Universidad Europea
- Degree in Pharmacy from the Federal University of Minas Gerais

Ms. Vega Arias, Lucía

- Government Affairs, Policy & Patients Advocacy Senior Professional at Merck España
- Government Affairs Manager in Health Sector Consulting
- Master's Degree in Access and Relations with Health Administrations
- Degree in Law, Sociology and Political Science and Administration

Ms. Mir Melendo, Nuria

- Medical Director of the Rare Diseases Area at PFIZER SPAIN
- Master's Degree in Marketing for the Pharmaceutical Industry from Instituto de Empresa
- Specialist in Clinical Microbiology and via FIR, Ramón y Cajal University Hospital
- Graduate in Pharmacy from the University of Navarra

D. Aller Álvarez, Rubén

- Specialist in Health Technologies
- Expert in circular economy applied to the health sector
- Member of the Board of Directors, Spanish Society of Clinical Engineering Therapy

05

Structure and Content

The specialists who enter this program will obtain an update of their knowledge through a study plan configured to offer the most relevant and innovative information in the field of *Medical Affairs*. For this purpose, it has a syllabus divided into 10 modules that will introduce you to the raison d'être of the medical department in pharmaceutical companies, pharmacoeconomics, digital transformation in this industry or professional competencies for working in *Medical Affairs*. Likewise, the multimedia resources and the *Relearning* system will lead the professional to enter in a much more dynamic and attractive way through the content of this Professional Master's Degree.

A curriculum that will take you deep into the latest techniques, digital tools and resources used in Medical Affairs"

Module 1. The drug access environment in the 21st century

1.1. Role of the pharmaceutical industry in the provision of health care in health systems
- 1.1.1. Core competencies that a public health administration should have
- 1.1.2. Constantly changing health care models Emergence of new technologies, need for greater efficiency and sustainability
- 1.1.3. Innovative industry challenges for the development of innovative treatments The benefits of public-private collaboration in R&D
- 1.1.4. Challenges of the Pharmaceutical Industry in market access The benefits Public-Private Partnership Models

1.2. Current challenges and pricing and reimbursement
- 1.2.1. Challenges for the NHS Increased life expectancy-timeliness more sophisticated drugs uncertainty management
- 1.2.2. Pricing and financing procedure. Ministries of health, price commissions, pharmaceutical benefit advisory committees
- 1.2.3. Drug pricing and pricing policies
- 1.2.4. Current panorama of innovative drug financing. Uncertainty management
- 1.2.5. Models of access to innovation and management of clinical and budgetary uncertainty by the pharmaceutical industry

1.3. *Stakeholders* of the pharmaceutical industry I
- 1.3.1. The different *Stakeholders* and their interests
- 1.3.2. Relationship between industry and health care managers: public and private spheres
- 1.3.3. Relationship between industry and public administrations
- 1.3.4. Relationships with health care professionals

1.4. *Stakeholders* of the pharmaceutical industry II
- 1.4.1. Patient relations as a key stakeholder in the health care environment
- 1.4.2. Relations with other *Stakeholders*: scientific societies, professional associations, *Lobby* and influence groups, political institutions, media

1.5. Types of Drugs Innovative pharmaceuticals
- 1.5.1. Types of drugs: innovators, generics and biosimilars
- 1.5.2. Market introduction of an innovative drug. Importance of a good identification according to the drug type
- 1.5.3. Approximation Strategy and Match with different Customers
- 1.5.4. Rare diseases and orphan drugs
- 1.5.5. Personalized Medicine

1.6. Types of Drugs Generic and biosimilar drugs
- 1.6.1. Differences between generics, biosimilars and originator drugs
- 1.6.2. Role of generics and biosimilars in the pharmaceutical market
- 1.6.3. Approximation Strategy and Match with different Customers
- 1.6.4. Forms of contracting, tenders and central purchasing office
- 1.6.5. Substitution, interchangeability of generic drugs

1.7. Business ethics and bioethics
- 1.7.1. Internal compliance policies of the pharmaceutical company
- 1.7.2. Transparency of the pharmaceutical industry's interrelationships

1.8. Transparencia de las interrelaciones de la industria farmacéutica
- 1.8.1. New diseases with unmet medical needs
- 1.8.2. Establish the phases involved in the development of a new drug. Well-defined investment strategies
- 1.8.3. Need to implement new technologies in the research, development and production processes of the innovative drug
- 1.8.4. Competitor entry and shortening of the drug life cycle
- 1.8.5. Sustainability, equity and information management systems

1.9. Water in the Pharmaceutical Industry
- 1.9.1. Personalized and Precision Medicine
- 1.9.2. Role of patients in decision making
- 1.9.3. The Transparency Commitment
- 1.9.4. Basis for public-private partnerships

1.10. From universal access to innovative drugs to cost control
- 1.10.1. Evolution of access to innovative medicines
- 1.10.2. The Cost of Medication
- 1.10.3. Clinical Relevance
- 1.10.4. The Makers (F) Map
- 1.10.5. Finding the right balance

Module 2. Medical affairs department

2.1. What is the medical affairs department?
- 2.1.1. History of the Medical Affairs department and its evolution in pharmaceutical companies
- 2.1.2. Objective and functions of the department
- 2.1.3. General department structure in different companies

2.2. Medical affairs department in pharmaceutical and biotech companies *Biotechs*
- 2.2.1. Relationship of medical affairs with commercial departments
- 2.2.2. Relationship of medical issues with the *Market Access* Department
- 2.2.3. Relationship of medical issues with the *Regulatory* Department
- 2.2.4. Relationship of medical issues with the Research and Clinical Trials Department and Clinical Trials
- 2.2.5. Product Life Cycle of issues

2.3. Product Life Cycle medical
- 2.3.1. La Product Life Cycle Strategies
- 2.3.2. Launching strategies

2.4. Medical plan and product plan
- 2.4.1. Definition of medical plan and product plan
- 2.4.2. Product plan structure: strategic and action plan
- 2.4.3. Medical Affairs *and Medical Societies*: support for health care professionals through societies

2.5. Roles in the Medical Affairs Department: the *Medical Advisor*
- 2.5.1. *Medical Advisor*: functions: design of medical product strategy
- 2.5.2. Management of medical projects and Phase IV studies
- 2.5.3. Medical project finance

2.6. Roles in the medical affairs department: the MSL
- 2.6.1. MSL functions: medical communication and interlocutors
- 2.6.2. Implementation of medical projects and territorial management
- 2.6.3. MSL *Skills*
- 2.6.4. Time management and prioritization

2.7. Medical communication and Insights gathering
- 2.7.1. High-impact F2F communication
- 2.7.2. Tailoring communication to profile and *Insights*based communication
- 2.7.3. Management of medical requests and negotiation

2.8. Communication Plan
- 2.8.1. Media and omni-channel plan
- 2.8.2. Communication at congresses
- 2.8.3. Integration of the communication plan in the medical plan

2.9. RWE and Phase IV studies
- 2.9.1. RWE and Phase IV study design
- 2.9.2. Medical plan integration
- 2.9.3. *Estudios/ensayos iniciados por investigadores y colaboraciones de investigación*
- 2.9.4. Collection and Measuring of Results

2.10. *Compliance* in the medical affairs department
- 2.10.1. Definition of promotion
- 2.10.2. Definition of *On Label/Off Label*
- 2.10.3. Differences between commercial department and medical affairs
- 2.10.4. Integrity at Work

Module 3. What is the reason for a Medical Affairs department? Its reason for being

3.1. Medical Affairs: the new role of the pharmaceutical industry
- 3.1.1. From how it was to how it is now
- 3.1.2. From Industries to Science
- 3.1.3. Beyond clinical trials: generating evidence

3.2. Expectations for the future of Medical Affairs departments
- 3.2.1. Relationship with public institutions, physicians and patients
- 3.2.2. "*Win-Win*" or "all together" as the future
- 3.2.3. Coordination of Clinical Trials
- 3.2.4. Research Project Design
- 3.2.5. Patient as a source of success

3.3. Commitment of the pharmaceutical industry
- 3.3.1. In promoting the well-being of patients with ethical criteria of professionalism
- 3.3.2. In generating and maintaining confidence in the prescribing of medicines
- 3.3.3. Objective: to contribute to the quality of care in a sustainable manner

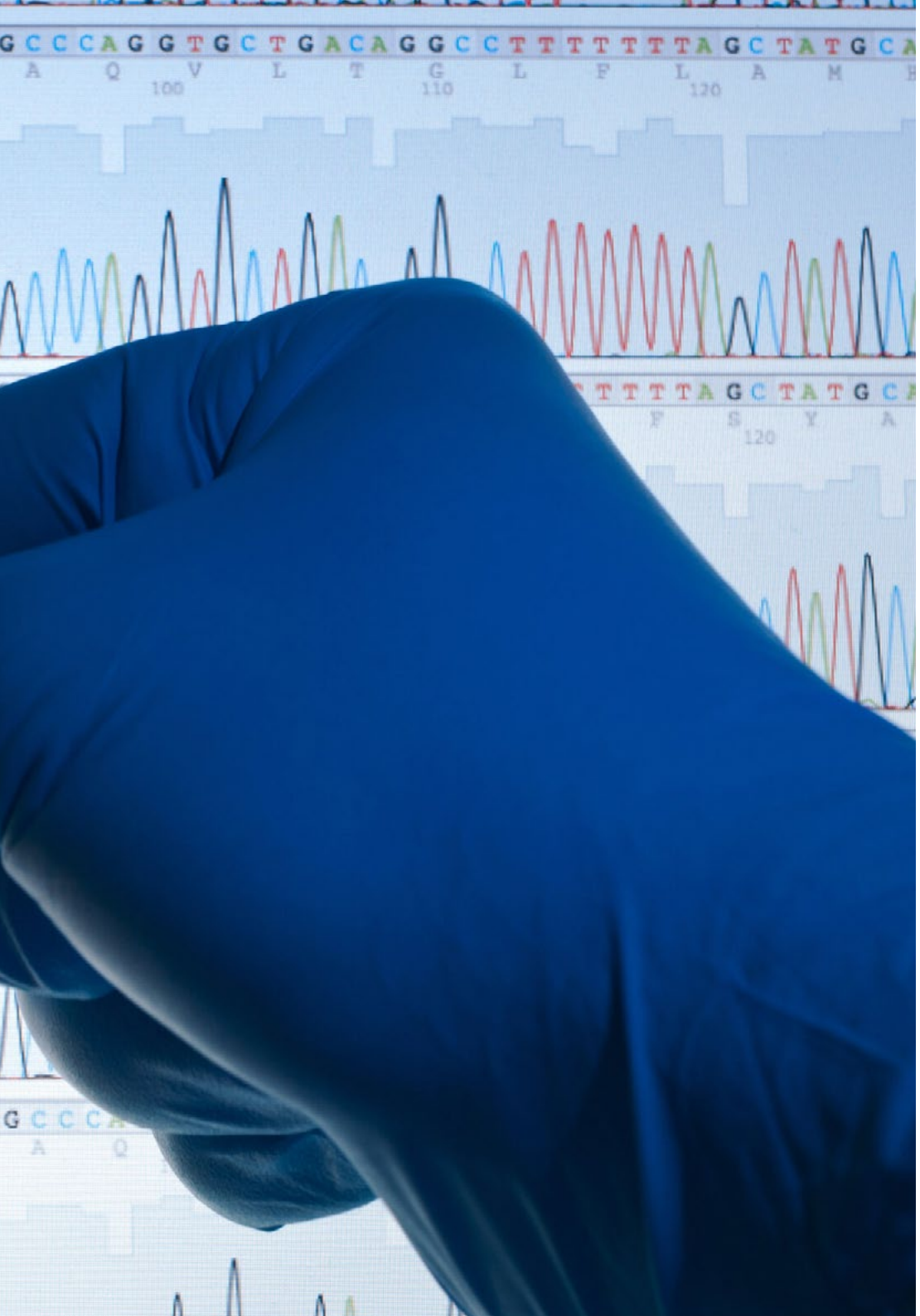
3.4. Ability to measure the impact of what we do
- 3.4.1. Training and information
- 3.4.2. Correct analysis of scientific and non-scientific information
- 3.4.3. Evaluating whether or not a treatment works for our patients
- 3.4.4. Know whether the strategic decisions we have made are having the desired impact the desired impact
- 3.4.5. Genuine concern for patients

3.5. Development of a health sciences professional in the pharmaceutical industry
- 3.5.1. Design of a Training Plan: what to study?
- 3.5.2. Self-training
- 3.5.3. Team profile: innovation, leadership, etc
- 3.5.4. Development plans within the role
- 3.5.5. Career Plans

3.6. Research with Drugs for Human Use
- 3.6.1. Definition, justification and objectives of research with drugs for human use
- 3.6.2. Drug Research Ethics Types
- 3.6.3. Ethical Foundations Standards of Good Clinical Practice
- 3.6.4. Agents involved in clinical research: sponsor, investigator, monitor, patient

3.7. Clinical Trials Phases I
- 3.7.1. Phase 0 Clinical Studies
- 3.7.2. Phase I Clinical Studies: Is the treatment safe?

3.8. Clinical Trials Phases II
- 3.8.1. Phase II Clinical Studies I: Is the treatment effective?
- 3.8.2. Phase III Clinical Studies: Is the new treatment under study better than the conventional treatment?
- 3.8.3. Phase IV Clinical Studies: What else do I need to know?



3.9. Clinical Trials Methodology
- 3.9.1. Clinical Trial Design
- 3.9.2. Clinical Trial Planning
- 3.9.3. Stages in the Development of Clinical Trials
- 3.9.4. Monitoring: follow-up and control. The Importance of Quality
- 3.9.5. Data Management Obtaining results
- 3.9.6. Risk-based monitoring
- 3.9.7. Decentralized studies

3.10. The future of clinical trial research
- 3.10.1. Clinical Trials Evolution
- 3.10.2. From clinical evidence to regulatory need
- 3.10.3. From clinical trial data to price approval: what more data is needed?
- 3.10.4. Patient Monitoring
- 3.10.5. The cooperative environment for evidence generation

Module 4. *Market Access, Health Economics & Outcomes Research*

4.1. Introduction to pharmacoeconomics and economic evaluation of pharmaceuticals
- 4.1.1. Basic Concepts
- 4.1.2. Why and for what purpose are they used in health decision making?
- 4.1.3. Opportunity Cost
- 4.1.4. Consumption of health and non-health resources in pharmacoeconomics studies (types of costs)
- 4.1.5. Measurement and estimation of health (*Outcomes*)
- 4.1.6. QALY: concept and methods for its calculation

4.2. Types of full pharmacoeconomic analyses most commonly used in the economic evaluation of drugs
- 4.2.1. Cost Analysis and Allocation
- 4.2.2. Cost-effectiveness and cost-utility analysis
- 4.2.3. Cost-Benefit Analysis
- 4.2.4. Concept of the incremental cost per additional unit of health benefit
- 4.2.5. Interpretation of the results of economic evaluations and decision rules

4.3. Types of partial pharmacoeconomic analysis
  4.3.1. Cost of illness and cost and consequence studies
  4.3.2. Budget Impact Analysis: what is it, how is it done and what is it for in drug pricing and financing decisions
  4.3.3. Other decision support analyses NNT, MCDA
4.4. Current importance of health outcome measurement
  4.4.1. Patient-reported health outcomes PROs and PREs in the context of clinical research
  4.4.2. Concept, definition and introduction to measurement with health scales
  4.4.3. What can be measured and with what instruments?
  4.4.4. The EQ-5D SF-36 Questionnaire
4.5. Critical review of published economic evaluations in the literature
  4.5.1. Application of existing list-guides
  4.5.2. Review of international guidelines and recommendations for designing and conducting and conducting economic evaluations
  4.5.3. Systematic reviews and meta-analyses of published economic evaluations
4.6. *Market Access*
  4.6.1. Environmental. Health Systems: Bismarck Model and Beveridge Model
  4.6.2. Equity/access
  4.6.3. Challenges of Health Systems
4.7. Arrival of the drug to the patient
  4.7.1. Price negotiation and financing process
  4.7.2. Most common barriers to drug financing/pricing
  4.7.3. Price erosion over the life of the medicine
4.8. What is market access?
  4.8.1. Introduction
  4.8.2. How to Create a Strategies for the Access?
  4.8.3. Value proposition and strategic market access dossier for a new drug of a new drug
  4.8.4. Definition and implementation of the access plan for a new therapeutic option
4.9. Different drug financing models
  4.9.1. Financial models (price-volume agreements, expenditure ceilings, etc.)
  4.9.2. Clinical outcome-based models (risk-sharing programs, etc.)
  4.9.3. Patient access schemes
  4.9.4. Other ways to increase market access for new therapeutic options
4.10. HTA evaluation (health technology assessment)
  4.10.1. Different methodologies in different countries
  4.10.2. Basic rules that an HTA regulation must have
  4.10.3. Current Situation and Future Development

Module 5. Vision from hospital pharmacy, clinical research and new tools to investigate and new tools for research

5.1. Structure and Function of the Hospital Pharmacy. Service
  5.1.1. Structure and Organization of the Hospital Pharmacy. Service
  5.1.2. Objectives and functions of a hospital pharmacy service
  5.1.3. Prioritization in the development of the functions of a pharmacy service
  5.1.4. Portfolio of services and areas of work
  5.1.5. Resources. Teamwork
5.2. Drug research in the hospital: hospital pharmacy vision
  5.2.1. Clinical Research and Trials
  5.2.2. Medications used and participants in a clinical trial
  5.2.3. Functions of the Pharmacy/Medicine Management System of the drug of the clinical trial
  5.2.4. Financing of studies and contracts
5.3. Role of the pharmacist in access to and positioning of medicines in the hospital in the hospital
  5.3.1. Authorization and marketing of medicines
  5.3.2. Drug selection: drug selection
  5.3.3. Selection of Evidence-Based Medicine
  5.3.4. Therapeutic Positioning Reports
5.4. Pharmacotherapeutic monitoring: health outcomes and telepharmacy
  5.4.1. Patient-perceived health outcomes (PROMs): What Are They? and how to measure them?
  5.4.2. Health outcomes patient reported experience (PREMs): What are they and how to measurement them?
  5.4.3. APN Clinical Practice Application
  5.4.4. Telepharmacy towards a new patient follow-up model

5.5. Safety in the Use of ICTs in the At Hospital
- 5.5.1. The Importance of Security/Safety
- 5.5.2. Medication errors
- 5.5.3. Risk Management and Notification Systems Incident
- 5.5.4. Prevention of Medication Errors

5.6. Advantages of Vaccines in General:
- 5.6.1. Why are vaccines necessary?
- 5.6.2. Impact of Vaccines on Health
- 5.6.3. Vaccine Safety
- 5.6.4. Phases in the Development of vaccines are

5.7. Vaccination in Risk Groups
- 5.7.1. Risk Groups
- 5.7.2. Risk Situations
- 5.7.3. Vaccination highlights: What's new?

5.8. Hospital research support platform
- 5.8.1. State of the art software as an aid to research
- 5.8.2. Website Architecture
- 5.8.3. Regulatory requirements

5.9. Healthy data
- 5.9.1. The logistics of sound data
- 5.9.2. OSHMS Certification

5.10. New technology applied to research
- 5.10.1. La New Technologies in Data Visualization
- 5.10.2. New technology in data analysis
- 5.10.3. New technology in the prediction of research data

Module 6. New value projects of the pharmaceutical industry. Digital transformation in Medical Medical Affairs

6.1. Change management, value-added services in strategic projects
- 6.1.1. Time of change or change of era
- 6.1.2. Why do changes fail?
- 6.1.3. People are at the center of change
- 6.1.4. Three elements to facilitate change
- 6.1.5. Eight steps to drive change

6.2. Introduction to *Lean*, , an essential ingredient in any collaborative project
- 6.2.1. Empathy
- 6.2.2. History of *Lean*
- 6.2.3. *Lean* ein health care
- 6.2.4. Five *Lean* principles
- 6.2.5. *Lean* Toolbox

6.3. Emotional leadership, development of skills needed to drive innovation
- 6.3.1. *Pull* v environment vs. *Push*
- 6.3.2. What is Leadership?
- 6.3.3. Leadership without hierarchy
- 6.3.4. Hierarchical leadership traps
- 6.3.5. Leader 5.0.

6.4. *Team Building*, reinforcement dynamics in organizational transformation processes
- 6.4.1. The four dimensions of personality
- 6.4.2. Necessary personality types
- 6.4.3. The five dysfunctions of a team
- 6.4.4. The five waves of trust
- 6.4.5. Creating High-Performance Teams

6.5. Cultural change strategies in healthcare organizations
- 6.5.1. What is Management Culture?
- 6.5.2. Why is it relevant in a change management process?
- 6.5.3. Barriers
- 6.5.4. Hoshin Kanri
- 6.5.5. Examples of major organizational changes

6.6. Digital Transformation
- 6.6.1. Knowing and understanding the customer
- 6.6.2. *Player*: profiles: professionals, patients, institutions and medical societies and medical societies
- 6.6.3. Real-time information
- 6.6.4. Efficient, effective and certified information mapping

6.7. Educational and training strategy
- 6.7.1. Definition and objectives
- 6.7.2. Data Science
- 6.7.3. Living information as constantly evolving
- 6.7.4. Continuous training as a Medical Affairs

6.8. Content at the center
- 6.8.1. Content generator and manager
- 6.8.2. Knowing the needs of the *Player*
- 6.8.3. Create ad hoc material based on your needs
- 6.8.4. Reference: Based Content Quality

6.9. Measurement the implementation of the strategy
- 6.9.1. Definition and objectives
- 6.9.2. What are Assets of Cultural Interest?
- 6.9.3. Indicator-Based Assessment
- 6.9.4. Visualization as an Analysis Tool

6.10. *Agile Mindset*
- 6.10.1. What is *Agile Mindset*?
- 6.10.2. Predictive as a tool for decision making
- 6.10.3. Advantages and Disadvantages
- 6.10.4. Design of a training plan for the creation of opinion leaders

Module 7. Statistics and R

7.1. Biostatistics
- 7.1.1. Introduction to The Scientific Method
- 7.1.2. Population and Sample. Sampling Measures of Centralization
- 7.1.3. Discrete Distributions and Continuous Distributions
- 7.1.4. General Outline of Statistical Inference. Inference about a Normal Population Mean. Inference about a General Population Mean
- 7.1.5. Introduction to Nonparametric Inference

7.2. Introduction to R
- 7.2.1. Basic Features of the Program
- 7.2.2. Main Object Types
- 7.2.3. Simple Examples of Simulation and Statistical Inference
- 7.2.4. Graphs
- 7.2.5. Introduction to R Programming

7.3. Regression Methods with R
- 7.3.1. Regression Models
- 7.3.2. Variable Selection
- 7.3.3. Model Diagnosis
- 7.3.4. Treatment of Outliers
- 7.3.5. Regression Analysis

7.4. Multivariate Analysis with R
- 7.4.1. Description of Multivariate Data
- 7.4.2. Multivariate Distributions
- 7.4.3. Dimension Reduction
- 7.4.4. Unsupervised Classification: Cluster Analysis
- 7.4.5. Supervised Classification: Discriminant Analysis

7.5. Regression Methods for Research with R
- 7.5.1. Generalized Linear Models (GLM): Poisson Regression and Negative Binomial Regression
- 7.5.2. Generalized Linear Models (GLM): Logistic and Binomial Regressions
- 7.5.3. Poisson and Negative Binomial Regression Inflated by Zeros
- 7.5.4. Local Fits and Generalized Additive Models (GAMs)
- 7.5.5. Generalized Mixed Models (GLMM) and Generalized Additive Mixed Models (GAMM)

7.6. Statistics Applied to Biomedical Research with R I
- 7.6.1. Basic Notions of R. Variables and Objects in R. Data handling. Graphic files
- 7.6.2. Descriptive Statistics and Probability Functions
- 7.6.3. Programming and Functions in R
- 7.6.4. Contingency Table Analysis
- 7.6.5. Basic Inference with Continuous Variables

7.7. Statistics Applied to Biomedical Research with R II
- 7.7.1. Analysis of Variance
- 7.7.2. Correlation Analysis
- 7.7.3. Simple Linear Regression
- 7.7.4. Multiple Linear Regression
- 7.7.5. Logistic Regression

7.8. Statistics Applied to Biomedical Research with R III
- 7.8.1. Confounding Variables and Interactions
- 7.8.2. Construction of a Logistic Regression Model
- 7.8.3. Survival Analysis
- 7.8.4. Cox Regression
- 7.8.5. Predictive Models. ROC Curve Analysis

7.9. Statistical *Data Mining* Techniques with R I
- 7.9.1. Introduction. *Data Mining*. Supervised and Unsupervised Learning. Predictive Models. Classification and Regression
- 7.9.2. Descriptive Analysis Data Pre-Processing
- 7.9.3. Principal Component Analysis (PCA)
- 7.9.4. Principal Component Analysis (PCA)
- 7.9.5. Cluster Analysis Hierarchical Methods. *K-Means*

7.10. Statistical *Data Mining* Techniques with R II
- 7.10.1. Model Assessment Measures. Predictive Ability Measures. ROC Curves
- 7.10.2. Models Assessment Techniques. Cross-Validation. Bootstrap Samples
- 7.10.3. Tree-Based Methods (CART)
- 7.10.4. *Support Vector Machines* (SVM)
- 7.10.5. *Random Forest* (RF) and Neural Networks (NN)

Module 8. Professional competencies to work in *Medical Affairs*

8.1. Effective public speaking
- 8.1.1. Ensuring the success of your presentation: overcoming stage fright. Relying on oneself to occupy all the space. Harmonizing (voice, gestures, posture, look)
- 8.1.2. Clearly present your ideas: organize your thinking. Define your objectives to maintain a direction. Structure your message
- 8.1.3. Establishing an authentic dialogue: understanding the keys to communication. Use and take advantage of the group's resources. Encourage and control public participation. How to get ideas across?
- 8.1.4. Make the public your ally: keep them interested with or without media. Know how to react during exchanges with improvisation. Know how to close

8.2. Managing emotions in conflict situations
- 8.2.1. Understanding emotions: the role of the brain. Identifying Emotions
- 8.2.2. Developing emotional balance: managing incoherent emotional reactions. Develop Self-confidence
- 8.2.3. Using emotions to build trust
- 8.2.4. Solve conflict situations
- 8.2.5. Develop Control skills

8.3. Leadership
- 8.3.1. Strategic planning: tools to build the vision focused on achieving the objectives. Planning as a Success Warranties
- 8.3.2. Decision-making: decision-making process with a clear methodology to avoid unnecessary subjectivity. Balance between reason and emotion
- 8.3.3. Achievement orientation: work by objectives. Tools to define objectives and their follow-up. Introduction to Servlets
- 8.3.4. Continuous improvement: continuous learning. The Deming Cycle

8.4. Influence and negotiation
- 8.4.1. Basic principles of negotiation: I actively promote collaboration to provide the best solution for my clients and colleagues
- 8.4.2. The Negotiation Process:. Objectives. Sides of the War of Negotiation
- 8.4.3. Negotiation Strategies How to approach the negotiation?
- 8.4.4. Communication and influence: convincing and making winning proposals

8.5. Personal Brand
- 8.5.1. Understanding what personal branding is: Why is it important and what does it bring us?
- 8.5.2. Building and managing your personal brand: five universal goals for building your personal brand. How to establish a network of contacts?
- 8.5.3. Social networks: choose your social networks (Linkedin, Twitter, Facebook, Instagram)
- 8.5.4. Launching your personal brand: personal branding campaigns and how to measure success

8.6. Adaptation to Change
- 8.6.1. Accepting change: this is the phase of understanding the need for change, when people are stabilized and accept the new situation
- 8.6.2. Resistance to change: knowing how to identify the barriers and difficulties that position people against change is a way to find solutions that help to incorporate new ways of doing things
- 8.6.3. Process of Change. The hero's journey: understanding the process of change from denial to transformation of individuals
- 8.6.4. Change management in organizations: understanding Kotter-like models of change management in organizations

8.7. Problem Solving
- 8.7.1. Understanding of the problem: understanding the problem, identifying its causes and the challenges it presents
- 8.7.2. Idea generation: ideation and creativity processes to develop different solutions
- 8.7.3. Analysis: idea analysis models
- 8.7.4. Decision-making: tools for decision making

8.8. Team Management
- 8.8.1. Functional teams: achievement-oriented teams. Lencioni Pyramid
- 8.8.2. Tools for Interdisciplinary Team Management
- 8.8.3. Motivation techniques: models for motivating team members. Intrinsic and Motivation Extrinsic Motivation
- 8.8.4. *Feedback*: reinforce the employees' sense of responsibility in the development of the company's work

8.9. Professional efficiency Time Management
- 8.9.1. The time paradigm: understanding the relative importance of time
- 8.9.2. Personal efficiency: be a strategist of your time and focus on what is really important to improve your productivity
- 8.9.3. Time management tools and techniques: stress management, time management tools and methods

8.10. Job Placement
- 8.10.1. Setting your career goal: tools to define your career goal
- 8.10.2. CV preparation: identification of professional skills and competencies for CV preparation
- 8.10.3. Job search: job search techniques. *Networking*, social networks, search engines and *Head Hunters*
- 8.10.4. The Interview How to face a job interview?

Module 9. Clinical Practice Guidelines. *Real Word Evidence*. Critical Reading of Articles

9.1. Introduction to Evidence-Based Clinical Practice Scientific
- 9.1.1. Health technology assessment. GPC Framework
- 9.1.2. Evidence-Based GPC Medicine Methodological Approach
- 9.1.3. Key Aspects in the GPC Production
- 9.1.4. From evidence to recommendations

9.2. Clinical practice guideline quality assessment tool
- 9.2.1. Evaluation of GPC: Why and What For?
- 9.2.2. AGREE Collaboration
- 9.2.3. AGREE instrument: structure and content
- 9.2.4. Examples of CPG evaluation with the AGREE instrument

9.3. Sources of quality of evidence-based clinical practice guidelines
- 9.3.1. Quality CPG compiling agencies
- 9.3.2. GuiaSalud: national evidence-based quality CPG program
- 9.3.3. Centers that produce quality CPGs
- 9.3.4. Methodological centers: GIN international network
- 9.3.5. MySQL Database
- 9.3.6. Search Engines

9.4. Incorporation of patients in clinical practice guidelines
- 9.4.1. Necessity of Patient Incorporation-Up
- 9.4.2. Aspects Methodology to Consider
- 9.4.3. Examples of patient participation in CPGs
- 9.4.4. International approach: *Patient Involvement*

9.5. Decision Support Tools share
- 9.5.1. The need for shared decision support tools
- 9.5.2. Conceptual Principles
- 9.5.3. Practical Examples

9.6. *Real-world Evidence*
- 9.6.1. Need to generate new evidence
- 9.6.2. Studies based on real clinical practice data: design, analysis, minimization of bias
- 9.6.3. IA as tools for the generation of evidence
- 9.6.4. AI-based advances for healthcare interventions

9.7. The importance of critical reading, methodology and structure
- 9.7.1. Levels of scientific evidence
- 9.7.2. Intervention
- 9.7.3. Methods to be used
- 9.7.4. Types of Studies

9.8. Clinical Research and Trials
- 9.8.1. Hypothesis Testing
- 9.8.2. Power of the study
- 9.8.3. Types of and Tests Variables
- 9.8.4. Types of Trials
- 9.8.5. Types of Intervention: *Intention-to-treat* o *Per-protocol*
- 9.8.6. Non-inferiority
- 9.8.7. Biases

9.9. Systematic Reviews and Meta-Analyses
- 9.9.1. Systematic Reviews
- 9.9.2. Meta-Analysis

9.10. Electronic medical education
- 9.10.1. Drug Information Sources
- 9.10.2. Blogs, infographics, podcasts
- 9.10.3. Medical education portals
- 9.10.4. Virtual congresses
- 9.10.5. *Webinars* and *Webcasts*, eMSL, eKOL

Module 10. *Medical Information*

10.1. Introduction. Organization of the search process
- 10.1.1. Research Question What is it for?
- 10.1.2. Objectives of the Search
- 10.1.3. Bibliographic/material/human resources at our disposal

10.2. Biomedical information resources
- 10.2.1. International sources: Pubmed, Embase, WOS, etc
- 10.2.2. Sources in Latin America: CSIC, Ibecs, LILACS, etc. indexes
- 10.2.3. Sources for locating clinical trials: WHO, ClinicalTrials, Cochrane CENTRAL, etc
- 10.2.4. Drug Information Sources: Bot Plus Web, FDA, etc
- 10.2.5. Evidence: Based Medicine. Uptodate, iloveevidence, Tripdatabase
- 10.2.6. Other resources: official organizations, web pages, scientific societies, associations, evaluation agencies, etc

10.3. Databases. Basic concepts for quality search strategies
- 10.3.1. What is Database?
- 10.3.2. Natural language. Mapping of terms
- 10.3.3. Controlled language. Thesauri
- 10.3.4. Boolean Operations

10.4. Bibliographic searches in Pubmed
- 10.4.1. Simple search and exploratory search
- 10.4.2. Mapping of terms
- 10.4.3. Advanced Search
- 10.4.4. Keys to search
- 10.4.5. Search strategy and results management. Alerts Bibliographic Reference Management Systems

10.5. Procurement Documentation Adaptation to other databases
- 10.5.1. Information needed to document and make the search replicable
- 10.5.2. Transparency and quality
- 10.5.3. Points to consider when adapting the search from one database to others
- 10.5.4. Peer review of searches
- 10.5.5. Updating the search strategy

10.6. Medical information for the patient
- 10.6.1. How to communicate to the patient?
- 10.6.2. Verbal and Written Communication
- 10.6.3. The leaflet as a basis for patient feedback

10.7. Medical information for HCP
- 10.7.1. How to communicate to the healthcare professional?
- 10.7.2. Verbal and Written Communication
- 10.7.3. The technical data sheet as a basis for response to the healthcare professional

10.8. Medical information *Off-Label*
- 10.8.1. Definition and Basic Concepts
- 10.8.2. *Data On File*
- 10.8.3. Foreign medication
- 10.8.4. Clinical trials, *Early Access* and access to medicines in special situations in special situations

10.9. Scientific documentation and information for *Medical Affairs*
- 10.9.1. Management of scientific documentation requests for the healthcare professional: transfers of value and local regulation
- 10.9.2. Safeguard copyrights
- 10.9.3. Medical information as a strategy for updating the medical team
- 10.9.4. Medical information in the identification of *Data Gaps*

10.10. Data extraction and *Insights* analysis
- 10.10.1. *Medical Insights*: definition and concepts
- 10.10.2. Medical information query management tools
- 10.10.3 Data Storage: *Data Privacy*
- 10.10.4 *Data Mining*

The Relearning system used by TECH will allow you to considerably reduce the hours of study and memorization"

06

Methodology

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

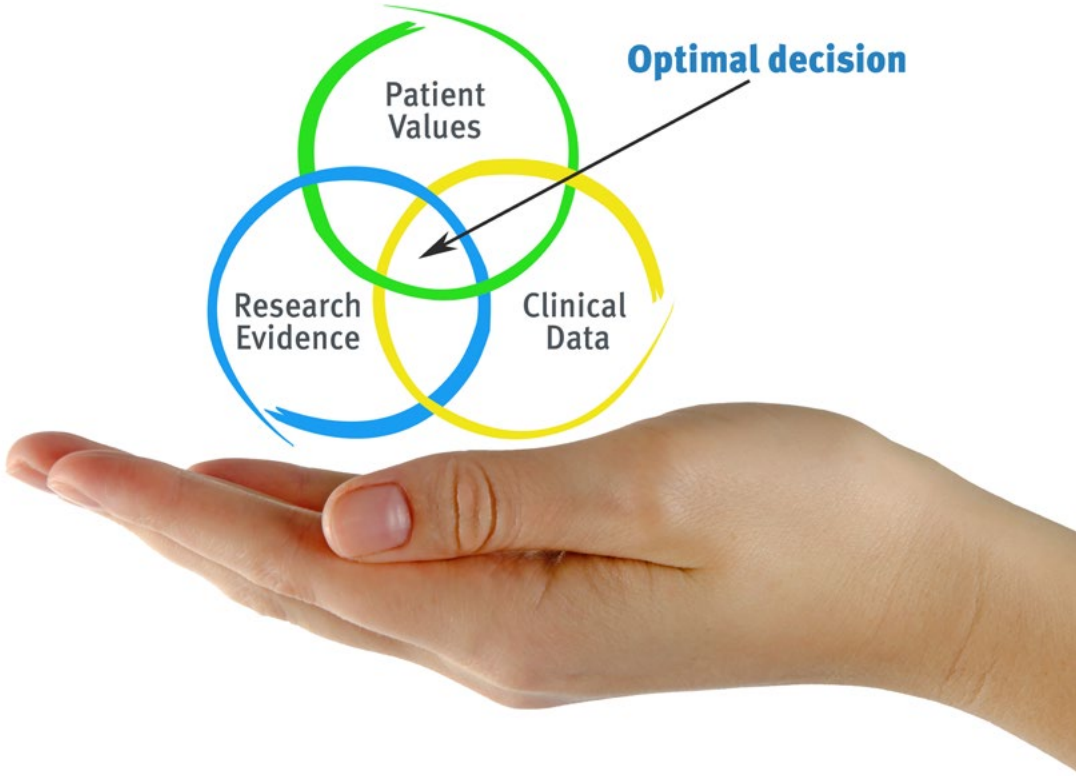
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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

What should a professional do in a given situation? 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 you will 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 in the physician's professional 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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.

2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.

3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.

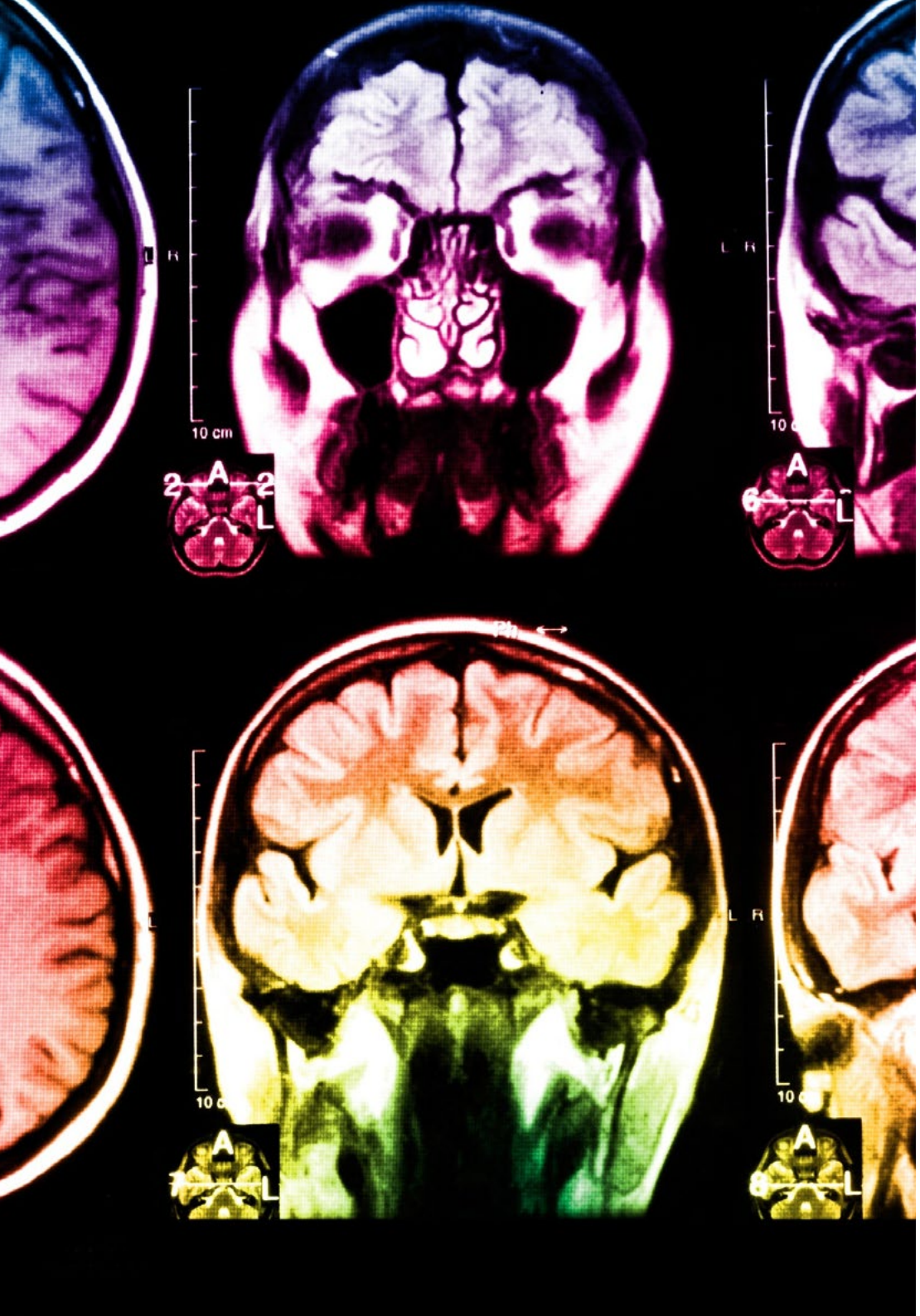
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

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.

Professionals will learn through real cases and by resolving 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 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. 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.

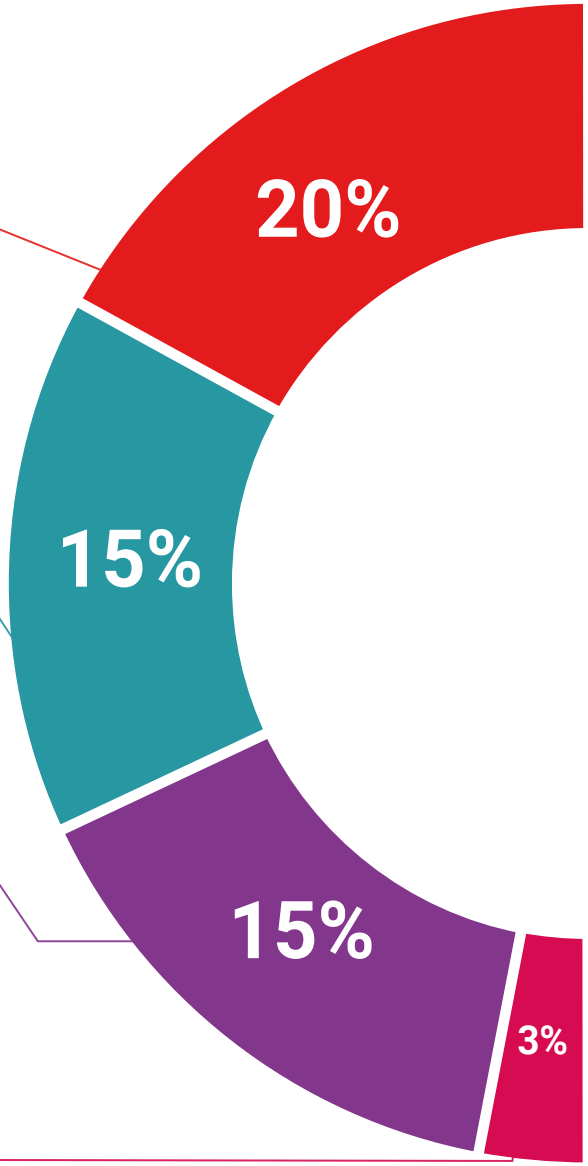
Interactive Summaries

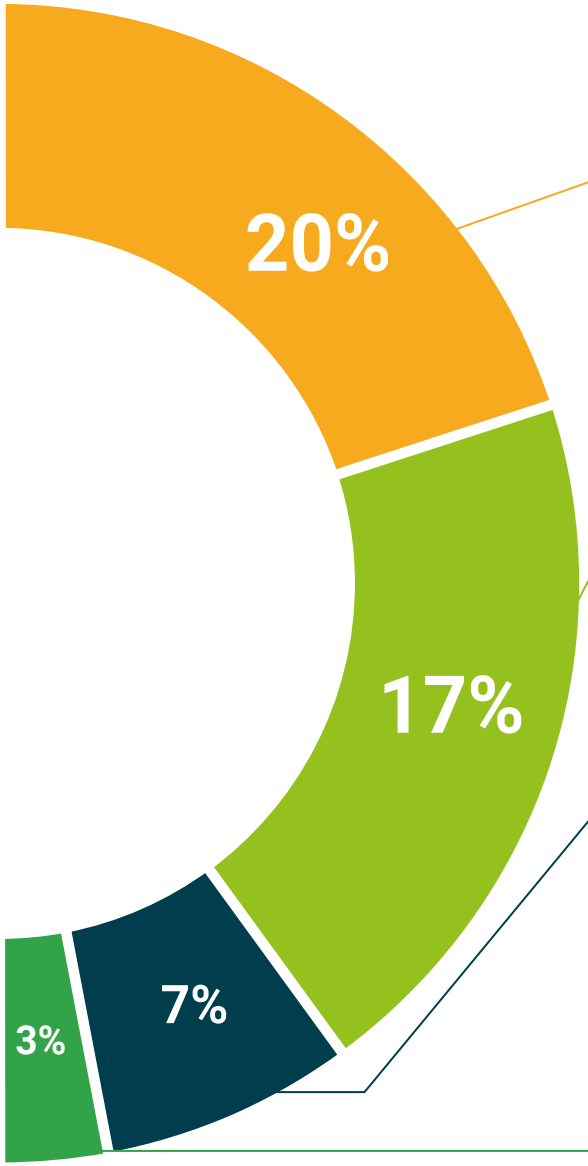
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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 on the usefulness of learning by observing experts. The system known as 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 Affairs guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree diploma 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 Affairs** 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 Affairs**
Official Nº of Hours: **1500 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 Affairs

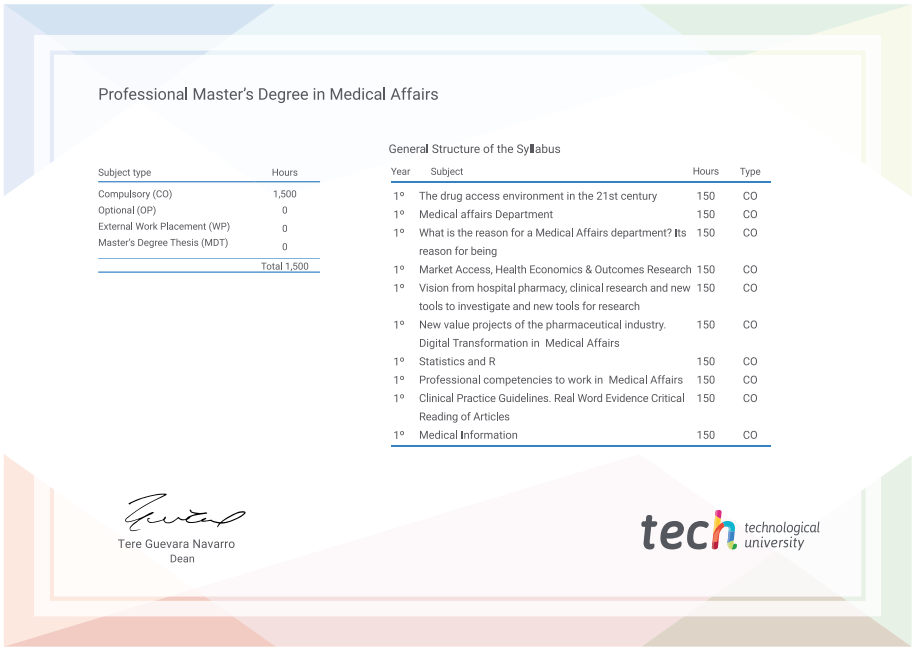
This is a qualification awarded by this University, equivalent to 1,500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates


Professional Master's Degree in Medical Affairs

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 drug access environment in the 21st century	150	CO
1º	Medical affairs Department	150	CO
1º	What is the reason for a Medical Affairs department? Its reason for being	150	CO
1º	Market Access, Health Economics & Outcomes Research	150	CO
1º	Vision from hospital pharmacy, clinical research and new tools to investigate and new tools for research	150	CO
1º	New value projects of the pharmaceutical industry. Digital Transformation in Medical Affairs	150	CO
1º	Statistics and R	150	CO
1º	Professional competencies to work in Medical Affairs	150	CO
1º	Clinical Practice Guidelines. Real Word Evidence Critical Reading of Articles	150	CO
1º	Medical Information	150	CO

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*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.

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Professional Master's Degree

Medical Affairs

- Modality: **online**
- Duration: **12 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Professional Master's Degree
Medical Affairs

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