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# Choosing a Path in Allergy and Clinical Immunology

ACADEMIC PRACTICE

# Allergic Diseases as a Global Public Health Issue

World Health Organization

- According to World Health Organization (WHO) statistics
- Hundreds of millions of subjects in the world suffer from rhinitis
- ▶ 300 million have asthma
- Affecting the quality of life of these individuals and their families
- Negatively impacting the socio-economic welfare of society



## Why is it necessary to recognize allergic diseases as a global public health concern?

- The prevalence of allergic diseases worldwide is rising dramatically in both developed and developing countries
- About 30-40% of the world population now being affected by one or more allergic conditions
  - Asthma
  - Rhinitis
  - Anaphylaxis
  - Drug, food, and insect allergy
  - Eczema
  - Urticaria (hives)
  - Angioedema

Very few countries have comprehensive services in this field of medicine

# Despite the obvious importance of allergic diseases...

- In general allergy is poorly taught in medical schools and during post-graduate medical education
- Many countries do not even recognize the specialties of Allergy or Allergy and Clinical Immunology

As a consequence



Many or most allergic patients receive less than optimal care from non-allergists

### Trained allergists/country

- The membership of WAO is approximately 35,000 allergists worldwide representing the bulk of the trained allergists globally.
- Japan, Germany and the US, there are 4,000-8,000 trained allergists per country
- ▶ I allergist per 25,000 to 75,000 patients
- That ideal care would be provided by about I allergist per 20,000-50,000 patients
- There are countries such as Costa Rica with less than 10 allergists and others with even fewer
- R. Pawankar, GW Canonica, ST.Holgate, RF Lockey. WAO White Book on Allergy. 2011

### What would be the justification?

- Recent epidemiological studies show a significant increase in the prevalence of allergic diseases worldwide
- In Mexico, as in other countries, allergic diseases are a real public health problem
- It is essential to the formation of specialized medical care for these conditions



### It requires ...

- A better understanding of the pathophysiology of immune-allergic
- Development of diagnostic and therapeutic procedures increasingly effective in the detection and treatment of the same

High quality training in the field of Allergy and Immunology

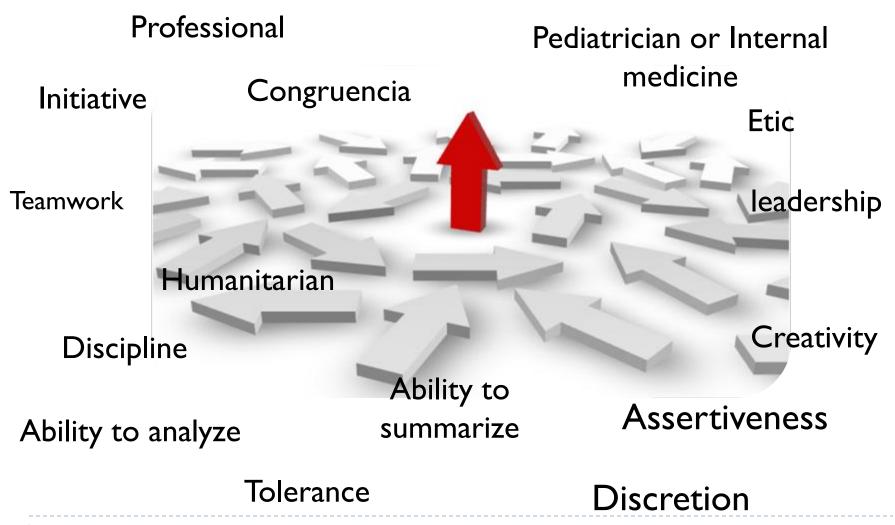


### **Graduate Studies**

 Graduate studies are the pinnacle of professional development training and university scientist



### Profile of admission to a subspecialty



What features should have to enter postgraduate study?

### What is an Allergist?

 An allergist is a physician who, after training in internal medicine or pediatrics, has successfully completed a specialized training period in allergy and immunology



Del Giacco S, Rosenwasser LJ, Crisci CD, Frew AJ, Kaliner MA, Lee BW, et al. What is an allergist? www.waojournal.org 1:19-20, 2008

## Center medical training in Allergy and Immunology Clinic in Mexico



•Instituto Nacional de Pediatría

•Hospital Infantil de México

 Centro Médico Siglo XXI, Centro Médico La Raza IMSS

Hospital Juárez

•Hospital Universitario de Puebla

•Hospital del ISSSTE: (20 Nov, I Oct, Lopez

Mateos), Guadalajara (Zapopan)

•Instituto Nacional de Enfermedades Respiratorias (INER)

•Centro Regional de Alergia e Inmunología Clínica , Hospital Universitario "Dr. José Eleuterio González" Monterrey, N.L

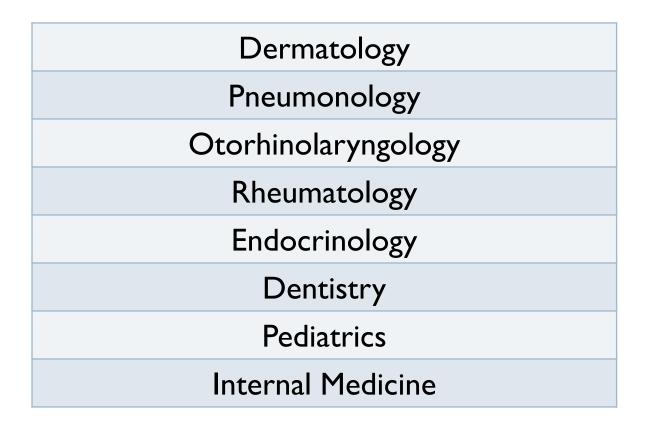
#### The duration of the training

is five/six years (including the common trunk in internal medicine and/or pediatrics, and two/three years of allergy and clinical immunology)

The allergist treats both adults and children while in some others, pediatricians, with specialty or subspecialty in allergy, are competent to treat children

### As part of allergy training...

▶ All allergists are trained in the relevant aspects:



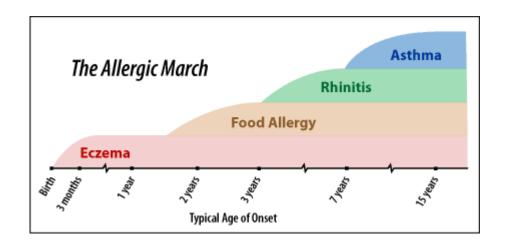
### The allergist should be capable of ...

- Ordering and interpreting allergyand immunology-related laboratory tests
- Diagnosis and Identification of causative Allergens
- Identify the allergens which cause an allergic disease and to provide patients with the chance to avoid them
- Can prescribe appropriate medications

- Extensive knowledge in the use of specific allergen and venom immunotherapy
- Management of adverse reactions and adjusting treatment dosages in more severe or complex cases
- Domain schemes of drug desensitization
- Management of co-morbidities of allergic diseases
- R. Pawankar, GW Canonica, ST.Holgate, RF Lockey.WAO White Book on Allergy. 2011

### Good allergy practice

Find the cause and prevent symptoms and disease progression, rather than just rely on medications to suppress the symptoms



# The practice of allergy involves the diagnosis and care of patients with:

- Rhino-conjunctivitis, along with nonallergic rhinopathy
- Sinusitis, both acute and chronic, alone or complicated with nasal polyps
- Otitis and Eustachian tube disorders
- Asthma and all its forms including cough-variant asthma and exerciseinduced asthma
- Cough from all causes
- Bronchitis, chronic obstructive pulmonary disease (COPD) and emphysema
- Hypersensitivity pneumonitis
- Alveolitis

- Atopic dermatitis/eczema
- Contact dermatitis
- Urticaria and angioedema
- Drug allergy
- Food allergy
- Latex allergy
- Insect allergy and stinging-insect hypersensitivity
- Gastrointestinal reactions resulting from allergy, including eosinophilic esophagitis and gastroenteritis
- Anaphylactic shock
- Immunodeficencies, both congenital and acquired
- Occupational allergic diseases



## Regional Center of Allergy and Clinical Immunology (CRAIC) University Hospital of UANL

- Over 60 years experience
- Functions of teaching undergraduate and graduate medical aid
- Development of basic and clinical research
- It is the only hospital north of the country that offers specialization in Allergy and Clinical Immunology and university endorsement has
- Inscribed on the National Register of CONACYT Graduate
- Recognized as High Level Graduate by the National Quality Postgraduate (PNPC)







#### Clinical and Academic Activities

- Outpatient and hospitalization
- Development of medical records

Physical examination techniques

Diagnostic Procedures
 Nasal cytology
 Spirometry
 Rhinomanometry
 Skin tests
 Challenge tests
 Interpretation of results



#### Clinical and Academic Activities

- Discussion of diagnosis
- Clinical cases session
- Bibliographic sessions
- Departmental meetings
- General Sessions
- Workshops
- Seminars
- Conferences
- Continuing Medical Education
- National and International Congress

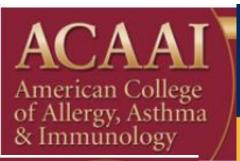








### Participation in National and International Congress



### XXII World Allergy Congress

CANCÚN, MÉXICO 4-8 December 2011



A Meeting of the World Allergy Organization A World Federation of Allergy, Asthma & Clinical Immunology Societies







2012 ANNUAL MEETING MARCH 2-6







European Academy of Allergy and Clinical Immunology Congress 2012





World Allergy Organization International Scientific Conference

6-9 December Hyderabad INDIA





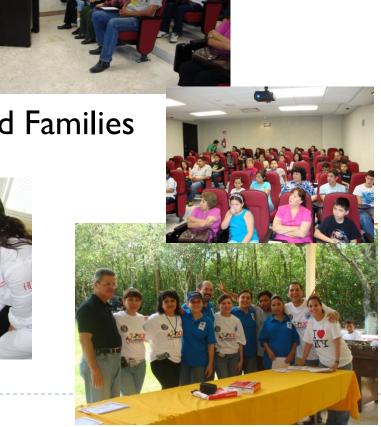
### Participation in community education

- Educational talks
- Workshops
- Sports activities recreation

Allergy Education for Patients and Families

- Diffusion
- Radio
- TV
- Schools







### **Educational Camps**





### **Medical Education in Allergy**

- Produce graduates equipped to further their careers in healthcare and in particular to enhance the number of individuals trained in the mechanisms and management of allergic diseases
- Develop an understanding of the processes involved in improving the management of patients with allergic disease
- Develop new areas of teaching in response to the advance of scholarship and the needs of vocational training
- Provide a training in research skills
- Develop skills and understanding of the more complex components of allergic disease encountered in specific areas of practice



### What is the goal of specialization?

- Being competent specialists
- High degree of quality care and warmth
- Leaders in their field
- Nationally and internationally recognized
- Able to provide quality health care
- Develop skills, abilities and skillsDiagnóstico

**Treatment** 

Prevention

Rehabilitation

Research

- Committed to improving the health of the community
- Teamwork with international collaboration



### Graduate profile

- Competent professional
- High scientific knowledge, basic and clinical
- Mastery of diagnostic and therapeutic procedures
- Autodidact
- Researcher
- Teamwork



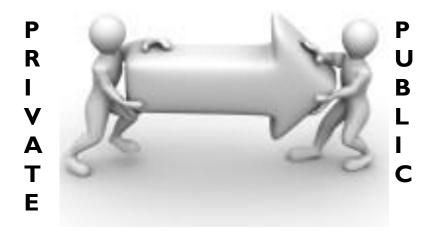
Professional
Ethical
Human
Leader in its field
Committed
Recognized
Promoter of new
Knowledge

### Where do we go?

### Which is best?



#### **MEDICAL PRACTICE**



**INVESTIGATION** 

What is the labor of the graduate?