APPENDIX B - GOALS AND OBJECTIVES

Stanford Allergy and Immunology Residency General Goals and Objectives

GOALS	OBJECTIVES	INSTRUCTIONAL ACTIVITIY	EVALUATION
Knowledge: To acquire a well-rounded and thorough knowledge of the essential basic and applied medical sciences pertaining to immunology and allergy and to be able to apply this knowledge when developing a treatment plan.	To understand: Detailed Basic Science Immunology Special physical, developmental, and psychological considerations for immunology patients Special physical, developmental, and psychological considerations for allergy patients Special physical, developmental, and psychological, and psychological considerations for allergy patients In the patients of the period of the property	 Journal Club presentations Faculty interaction Didactic sessions Weekly Immunology course Independent reading (Abbas, Middleton's, Leung) 	 Evaluations by faculty, staff, patients, other trainees, and self-evaluation Case logs Procedure logs Lecture presentation evaluations
Patient Care: To achieve the level of independent consultant in the domains of gathering diagnostic information, developing treatment plans, providing allergy and immunology services and procedures in the management of common and unique pediatric allergy and immunology diseases. To become adept at treatment of allergy and immunology diseases.	To acquire skills in: Allergy testing: skin pricks, patch test, intradermal Pulmonary function testing: full body plethysmography, spirometry testing, bronchodilator use Preparation of children and families for IVIG and SQIG use Physical exam findings: allergy, immunodeficiency Teaching on: asthma, food allergy, aeroallergy, drug allergy, immunodeficiency	Outpatient clinic in Allergy and Asthma Inpatient rounds and bedside teaching	 Evaluations by faculty, staff, patients, other trainees, and self-evaluation Case logs Procedure logs Portfolio evaluations (including patient and co-trainee evaluation)
Practice-Based Learning: To analyze their own practice systematically and to be able to retrieve, understand and apply scientific evidence related to the practice of immunology and allergy. To participate in the learning of fellow immunologists and allergists and other heathcare professionals.	To be able to define and analyze: Individual areas of their own practice that need improvement or can serve as examples for others. Critique their own practice in light of current scientific and biomedical knowledge related to immunology and allergy.	 Case presentation conferences Communication with library resources Journal Club and chapter review sessions Didactic sessions 	 Evaluations by electives faculty Semi-annul and annual fellowship program evaluations Fellow selfevaluation
Professionalism: To understand and apply basic principles of biomedical ethics. To introduce areas of academic immunology and allergy practice, including teaching, research, and	To offer trainees opportunities in: Instruction in biomedical ethics Analysis of their own practice in relation to ethical issues Teaching other trainees Mentoring in research activities Learning the basics of study	Bioethics and Risk Management lecture Participation in fellow and resident lecture series Working with faculty on research projects Weekly Journal Club	 Portfolios including patient and co worker evaluations Faculty evaluations

participation in professional organizations. Effective Communication:	design and critiquing scientific literature Introduction to writing scientific literature To be able to discuss issues	presentations Didactic sessions Weekly immunology course Modeling by faculty	• 360-degree
To understand and demonstrate cultural differences in age, gender, and authority roles. To work as an effective and efficient member of the clinical team	of informed consent and treatment risks and benefits to patients and/or parents To communicate the treatment-related risks and benefits with healthcare colleagues To communicate and work cooperatively with other healthcare professionals, including nurses, fellows, attendings, and clinical personnel.	 Work with interpreters Independent study, including suggested reading materials Work with respiratory therapist (PPTs) Work with nurses (skin testing, asthma education) 	evaluations by clinic personnel, patients and their families.
Systems-Based learning: To understand how the practice of immunology and allergy is part of a larger context of healthcare organization and delivery relevant to related medical specialty training that enhances the knowledge of immunology and allergy practitioners	To introduce trainees to: Electronic medical records Methods of cost analysis and cost containment Quality assurance and continuous quality improvement techniques in the practice of skin testing and drug desensitization Overall website design for allergy and immunology trainees at Stanford Educational training methods as part of larger patient-based materials at Stanford	 PBLI Case Reporting form Electronic medical records and quality assurance Quality assurance for medication lists Clinical improvement skills by attending meetings and giving feedback for general schedule and templates for outpatient clinics 	 Evaluations by electives faculty Semi-annul and annual fellowship program evaluations Fellow self-evaluation Portfolio evaluations

Stanford Outpatient Rotation Goals & Objectives

Goal 1. Diagnosis and management of asthma in the outpatient setting.

- 1. Understand the immunologic and pathologic basis of asthma.
- 2. Understand the criteria for the diagnosis of asthma.
- 3. Demonstrate the ability to obtain a history pertinent to the diagnosis and management of asthma.
- 4. Demonstrate the ability to categorize asthmatic patients by severity according to the National Asthma Education and Prevention Program guidelines:

http://www.nhlbi.nih.gov/health/prof/lung/index.htm#asthma

- 5. Know the differential diagnosis of asthma.
- 6. Understand the factors that may exacerbate asthma and how to address them.
- 7. Develop and demonstrate the ability to interpret and utilize pulmonary function tests in the diagnosis and management of asthma.
- 8. Be conversant with and understand the indications for the different categories of medications used in asthma.
- 9. Understand the current asthma clinical research protocols that are occurring in the Stanford outpatient area.
- 10. Document critical asthma history items in all verbal and written communications: asthma severity, medications, symptoms, and risk factors.
- 11. Evaluations as above.

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Goal 2. Diagnosis and management of rhinitis.

- 1. Read the Joint Council on Asthma, Allergy and Immunology Practice Parameters on Rhinitis: http://www.jcaai.org/page/practice_parameters
- 2. Demonstrate the ability to diagnose allergic rhinitis, non-allergic rhinitis, vasomotor rhinitis and aspirin sensitive rhinitis.
- 3. Obtain a history pertinent to the diagnosis and management of allergic rhinitis.
- 4. Understand the indications for the different categories of medications used in rhinitis.
- 5. Understand the indications for allergen immunotherapy in rhinitis.
- 6. Evaluations as above.

Goal 3. Diagnosis and management of sinusitis.

- 1. Understand the anatomical, pathological and microbiological basis of sinusitis in both adult and pediatric populations.
- 2. Read the Joint Council on Asthma, Allergy and Immunology Practice Parameters for the Diagnosis and Management of Sinusitis.

http://www.jcaai.org/page/practice_parameters

Demonstrate the ability to medically manage sinusitis.

Understand the indications for the surgical management of sinusitis.

Develop and demonstrate ability to perform fiber optic rhinoscopy as used for the management of sinusitis.

3. Evaluations as above.

Goal 4. <u>Diagnosis</u>, clinical presentation and management of dermatologic conditions, including atopic dermatitis, urticaria and angioedema.

- 1. Read and be conversant with the Joint Council on Asthma, Allergy and Immunology Practice Parameters on atopic dermatitis http://www.jcaai.org/page/practice_parameters
- 2 Identify and know the typical distribution of atopic dermatitis in both pediatric and adult populations.
- 3. Understand the clinical presentation, diagnosis, pathophysiology, and management of urticaria and angioedema.
- 4. Understand the clinical presentation, diagnosis, pathophysiology, and management of skin diseases associated with immunodeficiency.
- 5. Evaluations as above.

Goal 5. Diagnosis and management of food allergy.

- 1. Understand the pathophysiology of food allergy.
- 2. Demonstrate the ability to classify/diagnose adverse reactions to foods.
- 3. Know the foods commonly associated with hypersensitivity reactions.
- 4. Know the foods that have substantial immunological cross-reactivity with other allergens.
- 5. Demonstrate the ability to manage patients with food allergy.
- 6. Understand the procedure for blinded food challenge.
- 7. Evaluations as above.

Goal 6. Diagnosis and management of stinging insect hypersensitivity.

1. Read the Joint Council on Asthma, Allergy and Immunology Practice Parameters on Stinging Insect Hypersensitivity

http://www.jcaai.org/page/practice_parameters

- 2. Demonstrate the ability to manage patients with stinging insect hypersensitivity
- 3. Develop a plan for long-term management of insect hypersensitivity.

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- 4. Understand the indications for venom immunotherapy.
- 5. Evaluations as above.

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Goal 7. Management of immunodeficiency disorders in children and adults.

- 1. Understand the fundamental mechanisms of the immunologic response against pathogens and tumors.
- 2. Develop knowledge of the pathophysiology, diagnosis, and management of primary and acquired immunodeficiencies.
- 3. Perform a history and a physical examination pertinent to the diagnosis and management of immunodeficiency disorders.
- 4. Know the differential diagnosis of immunodeficiency disorders.
- 5. Appropriately order and interpret laboratory tests used in the diagnosis and management of immunodeficiency disorders.
- 6. Understand the indications for the different treatment modalities used in the management of immunodeficiency disorders.
- 7. Evaluations as above.

Goal 8. <u>Diagnosis and management of children and adults with other immunologic and allergic diseases</u>

- 1. Know the differential diagnosis and pathogenesis of diseases associated with elevated IgE levels and/or eosinophilia.
- 2. Understand the clinical presentation, diagnosis, and management of patients with Hyper IgE Syndrome.
- 3. Understand the clinical presentation, diagnosis, and management of patients with eosinophilic gastroenteritis and hypereosinophilic syndrome.
- 4. Demonstrate effective use of corticosteroids and other immunomodulatory drugs.
- 5. Evaluations as above.

Goal 9. <u>Leadership and communication skills to coordinate the care of a child or an adult with an allergic or immunologic disorder.</u>

- 1. Develop skills to coordinate a multidisciplinary care to inpatients with immunologic and allergic diseases, incorporating issues of nursing, pharmacy, social work and occupational therapy.
- 2. Recognize conditions requiring consultations from other specialty services.
- 3. Provide letters to the referring physicians to communicate the diagnostic findings and management recommendations related to the allergic and immunologic diseases.

Goal 10. Knowledge of clinical research

- 1. Understand the basic steps involved in implementation of a clinical research protocol.
- 2. Complete the Protection of Human Research Subjects Computer-Based Training for Researchers (http://ohsr.od.nih.gov/cbt/).

Document this by attaching a copy of a test you have performed to your portfolio.

- 3. Read and understand the current allergy clinical research protocols that are occurring in the outpatient clinic.
- 4. Participate in the safe and accurate implementation of the clinical research protocols by communicating with the principle investigator and other research staff.
- 3. Evaluations as above.

Allergy and Immunology Consult In Patient Services Goals & Objectives

- 1. Understand the immunology, clinical presentation, and management of drug allergy.
- 2. Understand the pathophysiology and management of anaphylaxis.
- 3. Read and be conversant with "The diagnosis and management of anaphylaxis" practice parameters developed by the AAAAI: http://www.jcaai.org/page/practice_parameters
- 4. Read and be conversant with the AAAAI/ACAAI drug allergy practice parameters:

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http://www.jcaai.org/page/practice parameters

- 5. Demonstrate the ability to generate a listing of differential diagnoses with appropriate priority.
- 6. Document written consultative assessments and recommendations in a clear, concise, and organized manner.
- 7. Demonstrate written and verbal communication skills in conveying complex information to non-specialist consult requesting physicians.
- 8. Demonstrate skills in obtaining a complete medication history utilizing the patient history, chart and electronic medical records as needed.
- 9. Use a flow chart to document the chronology of medication use and potential symptoms and signs of drug allergy.
- 10. Demonstrate a thorough and systematic approach to the evaluation of patients with suspected drug hypersensitivity.
- 11. Demonstrate the use of electronic literature searches to obtain information regarding drug hypersensitivities.
- 12. Understand the indications for, limitations of, and risks of skin tests for drug hypersensitivities.
- 13. Understand the indications for drug desensitization.
- 14. Demonstrate a thorough and systematic approach to the evaluation of patients with suspected immunodeficiency or immune dysfunction.
- 15. Develop and demonstrate an understanding of the diagnosis and management of latex allergy.
- 16. Develop working relationships with consult requestors and consultants in other specialties to optimize patient care.

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