

# Combined Internal Medicine & Pediatrics

Introducing *Med-Peds* 

Versatile training for the 21<sup>st</sup> century physician

## Residency Programs

Program Type	Training Length	Type
Pediatrics	3 years	Medical
Internal Medicine	3 years	Medical
Family Medicine	3 years	Medical
Med-Peds	4 years	Medical
Ob-Gyn	4 years	Surgical
General Surgery	5 years	Surgical

#### What is a Pediatrician and What is an Internist?

#### **Pediatrician**

- A physician who specializes in the development, care and diseases of children
- Infants, children, adolescents and young adults from birth to age 21
- Focuses on prevention, detection and management of physical, behavioral, developmental and social problems
- Developmentally oriented

#### Internist

- Doctors who focus on adult medicine- the prevention and treatment of adult diseases
- Specially trained to solve puzzling diagnostic problems

- Equipped to deal with all problems rare or common, simple or complex
  - Handle severe chronic illnesses
  - Situations where several different illnesses may strike at the same time

American Academy of Pediatrics (Pediatrics 101)
American College of Physicians (Doctors for Adults)

#### What is Med-Peds / Who We Are

- Physicians for children (pediatrics)
- Board Certified Pediatrician (children)
- 2 years of training instead of 3

- Physicians for adults (internal medicine)
- Board Certified Internist (adults)
- 2 years of training instead of 3



#### History of Med-Peds

1949 Two year rotating internship atUniversity of Rochester

1960's One year combined internship atNorth Carolina Memorial Hospital

1967 Boards <u>approve</u> combined training

1977 North Carolina formalizes training

1982 University of Rochester formalizes training

## History of Med-Peds

1989	First formal training guidelines
1991	Program Director's Association formed Med-Peds section of AAP created
1997	National Med-Peds Residents' Association is created
1997	Congress supports med-peds training pay AAP/AMA/ACP support dual listing
2006	Accreditation of med-peds programs  Med-Peds program requirements

### Versatile Med-Peds Physician



Survivors of chronic health conditions from childhood



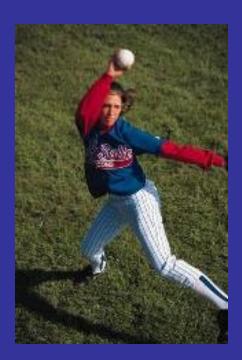
Treat common diseases



Global Health

### Versatile Med-Peds Physician

Prevent disease in families



Adolescents have special needs





ICU settings

### The Changing Epidemic

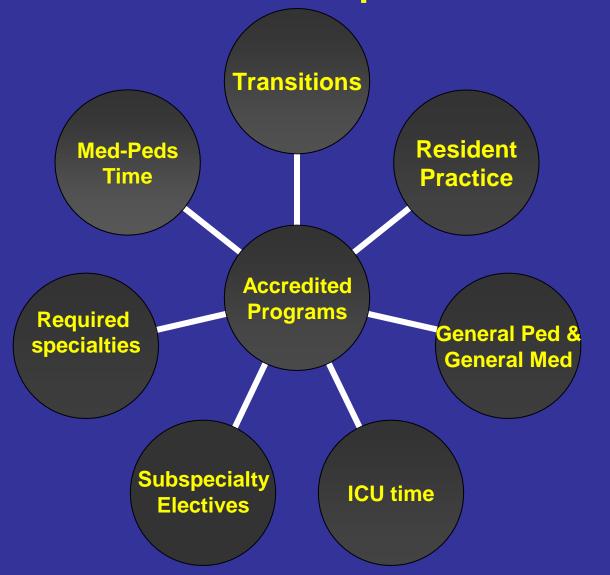
#### Child diseases in adulthood

- Congenital heart disease
- 2. Cystic fibrosis
- 3. Sickle cell disease
- 4. Childhood malignancies
- 5. Spina Bifida
- 6. Autism

#### Adult diseases in childhood

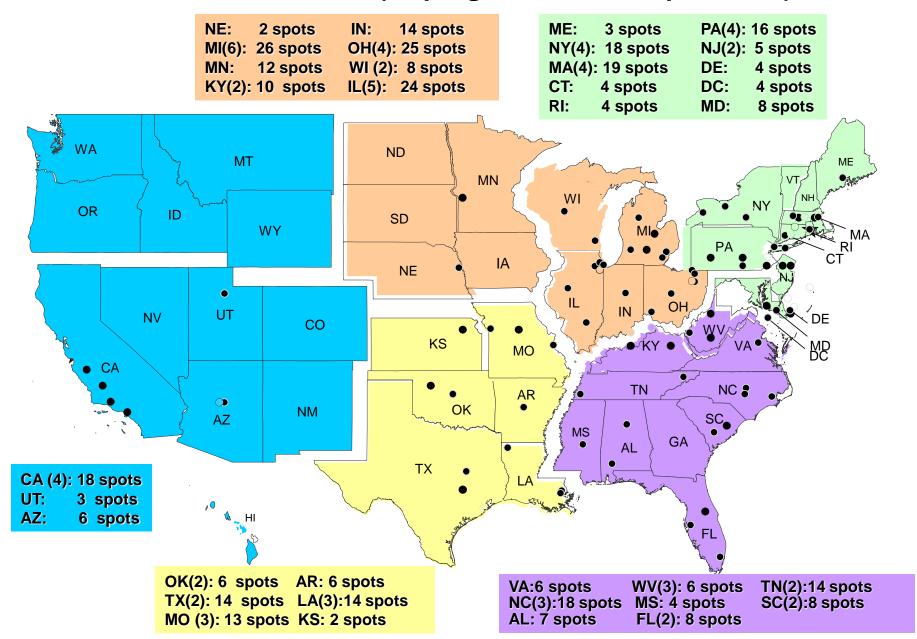
- 1. Diabetes
- 2. Obesity
- 3. Hypertension
- 4. Sleep apnea
- 5. Hyperlipidemia

### Med-Peds Requirements

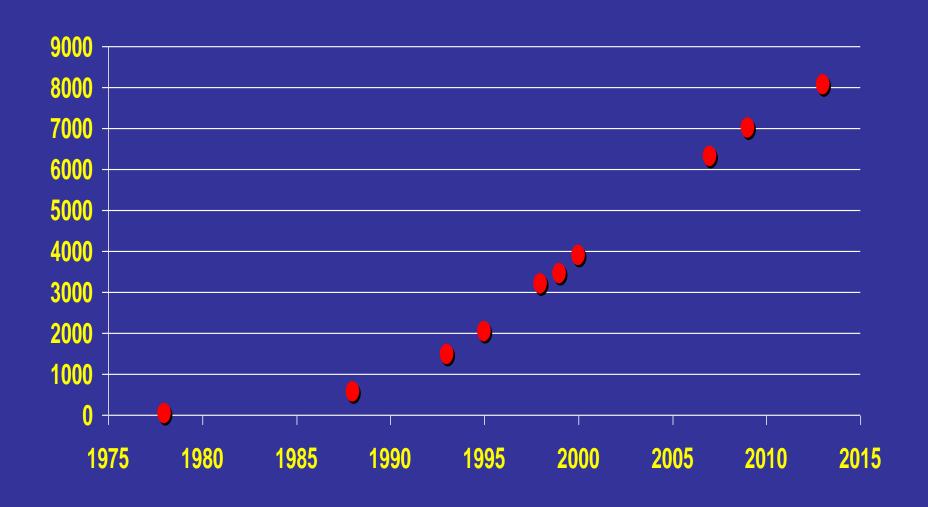


Internal Medicine	Number of months	Pediatrics	Number of months
General Inpatient Medicine	8	General Inpatient Pediatrics	5
Medical Intensive Care Unit	1-2	Pediatric Intensive Care Unit	1-2
Cardiac Intensive Care Unit	1-2	Neonatal Intensive Care Unit	2-3
Geriatrics	1	Newborn Nursery	1
Emergency Medicine	1	Emergency Pediatrics and Acute Illness Pediatrics	3
Outpatient Med-Peds continuity	36 clinics per year	Behavioral-Developmental Adolescent Medicine	2
Subspecialty experience (e.g. Infectious Diseases, Nephrology, etc.)	4	Subspecialty experience (e.g. Infectious Diseases, Nephrology, etc.)	4
Overall Ambulatory Experience (minimum)	33%	Overall Ambulatory Experience (minimum)	40%

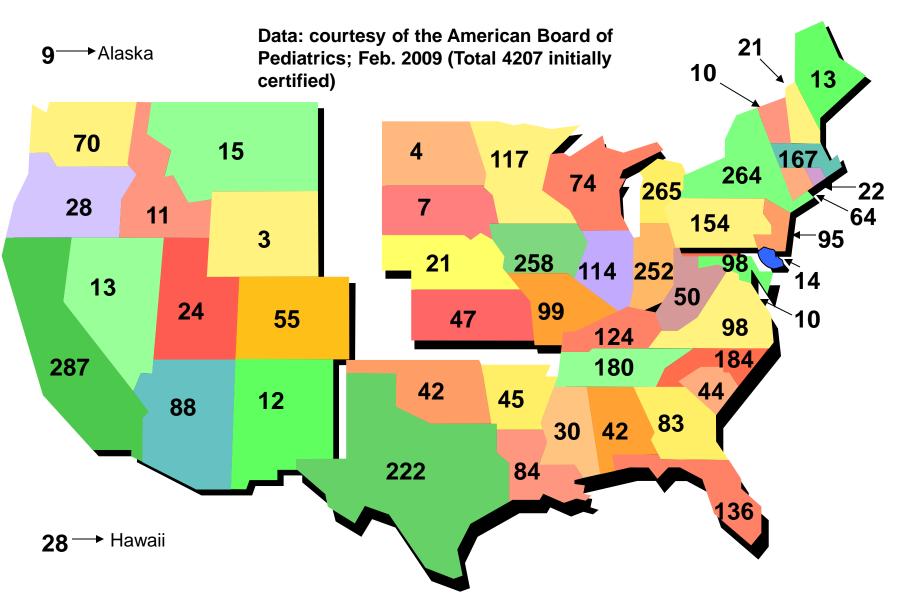
#### Med-Peds Match 2013 (77 programs with 366 positions)



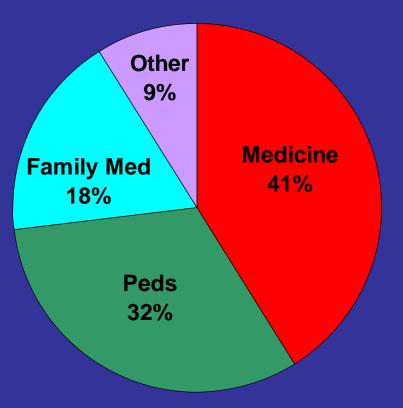
#### Med-Peds Graduates



### Where are the med-peds grads?



## Choosing a Career in Combined Internal Medicine and Pediatrics: Insights From Interns



Alternate careers considered by Med-Peds interns prior to residency

Melgar, T; Frohna JG. "Choosing a Career in Combined Internal Medicine and Pediatrics: Insight From Interns". Family Medicine. 2007;39:326-330

## Choosing a Career in Combined Internal Medicine and Pediatrics: Insights From Interns

	MP	IM	Peds	FM	Other
Considered as a career	86.8%	55.2%	50.7%	33%	19.1%
Contacted programs	93.8%	30.6%	29.9%	20.8%	8.3%
Applied	94.8%	18.4%	17.4%	8.3%	4.2%
Interviewed	94.8%	16.7%	14.2%	5.9%	4.2%
Ranked	94.3%	12.9%	11.4%	3.6%	3.5%

## The Effect of Dual Training in Internal Medicine and Pediatrics on the Career Path and Job Search Experience of Pediatric Graduates

Senior Residents	Med-Peds	Pediatrics
Equally prepared for primary care in both specialties	80%	77%
Equally prepared for fellowships in both specialties	90%	87%

## The Effect of Dual Training in Internal Medicine and Pediatrics on the Career Path and Job Search Experience of Pediatric Graduates

Senior Residents	Med-Peds	Peds
Would choose same specialty again	90	93
Primary Care Career	55	50
Subspecialty Career	18	31
Hospitalist Career	17	8
Other Career	10	11

Chamberlain, J; Cull W; Melgar T; Kaelber D; Kan B. "The Effect of Dual Training in Internal Medicine and Pediatrics on the Career Path and Job Search Experience of Pediatric Graduates".

Journal of Pediatrics.2007; 151: 419-424

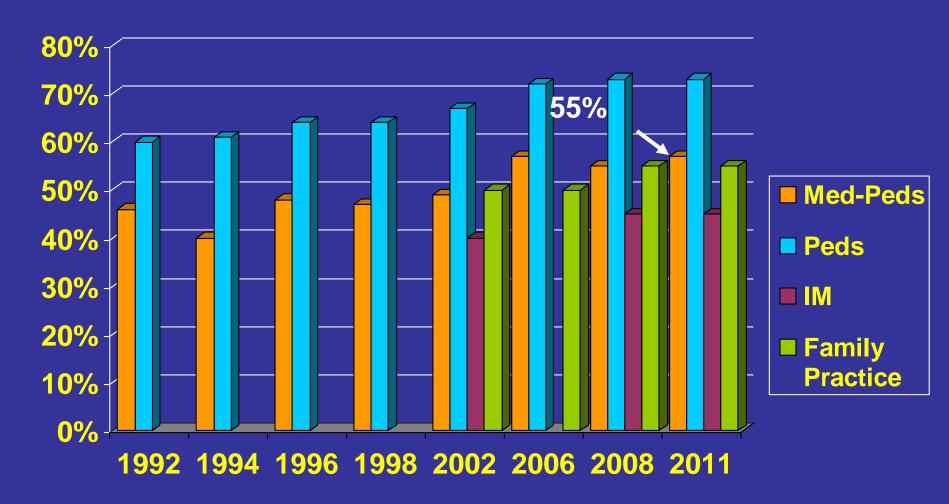
# The Role of the Med-Peds Physician in a Changing Medical World

- Editorial on the 40<sup>th</sup> birthday of med-peds
- Shift in career plans during residency
- Hospitalist
- "... med-peds graduates are well positioned to adapt to a changing medical landscape".

### Impact on Categorical Programs

- 40% of pediatrics programs have a medpeds program. Of all pediatric residents, med-peds residents are approximately 14% of the total
- 20% of medicine programs have a medpeds program. Of all categorical medicine residents, med-peds residents are approximately 9% of the total

#### Women and Med-Peds

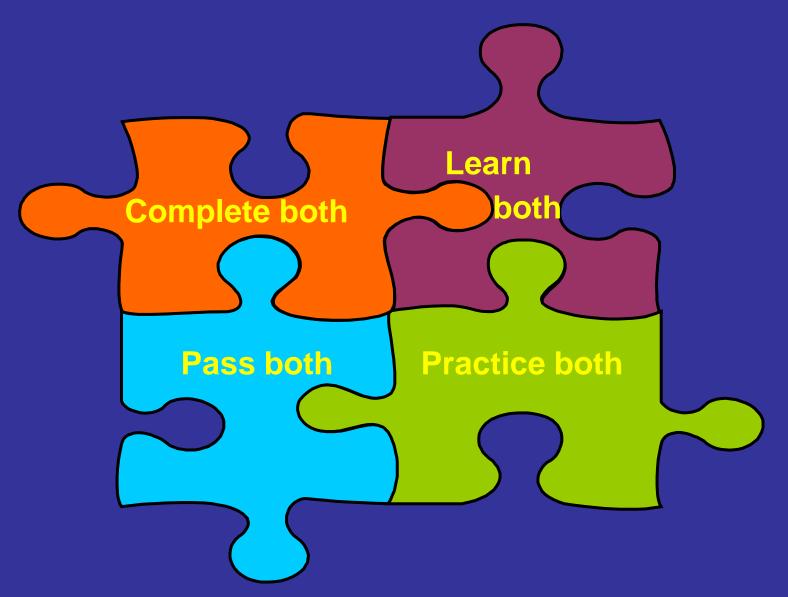


American Board of Pediatrics Annual Report 2007

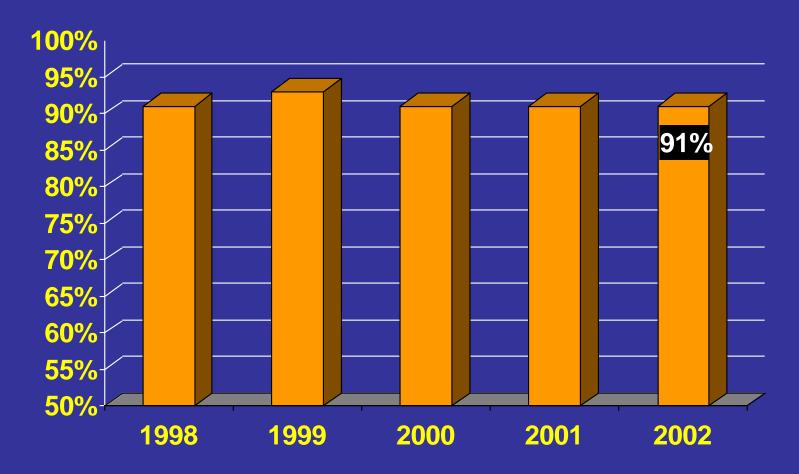
American Academy of Family Practice web site Jan 2008

National GME Census 2011

#### The Med-Peds Puzzle



## Is It Possible to <u>Complete</u> Both? (1998-2002)



Frohna J, Melgar T, Mueller C, and Borden S. Internal Medicine-Pediatrics Residency Training: Current Trends and Outcomes. Academic Medicine. 2004;79:591–596.

#### Is it Possible to *Learn* Both?

- Fundamental clinical skills in common: (history and physical, communication, organization)
- Advanced clinical skills in common: (information processing, reasoning, hypothesis testing, deduction, epidemiology)
- Some differences: manifestations/incidence of same conditions at different ages, nuances of treatment, neonatology and first two years of life

#### **Board Pass Rate**

The passage rate for med-peds graduates on the

American Board of Internal Medicine and

American Board of Pediatrics examinations in

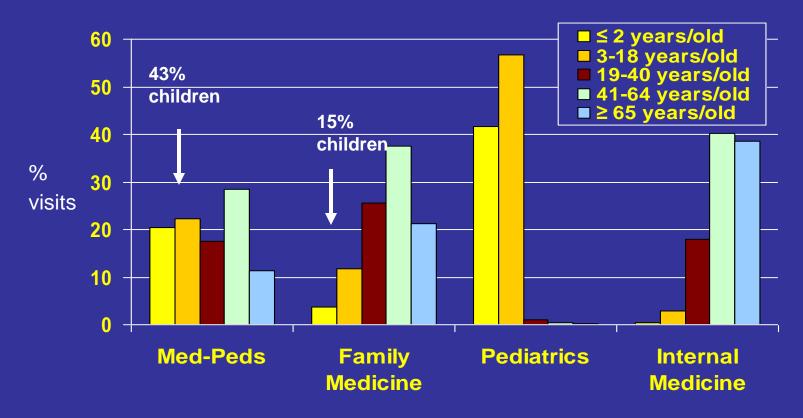
2011 and 2012 is equivalent

### Is it Possible to **Practice** Both?

- About <u>50-60%</u> of graduates go into primary care practice. The majority (between 77-93%) provide care for both adults and children.
  - 40% also have an academic appointment with a medical school
- About <u>18-25%</u> of graduates pursue fellowship and <u>50%</u> provide care for both adults and children.
  - 60% also have an academic appointment with a medical school

## Results from the National Ambulatory Medical Care Survey

Age Distribution of Patient Visits to Primary Care Providers Recorded in the National Ambulatory Medical Care Survey from 2000-2006



Fortuna, Ting, Kaelber and Simon. Characteristics of Medicine-Pediatrics Practices. Academic Medicine (84) 3; March 2009: 396-401

#### Fellowships and Subspecialties

- Qualify for ANY IM or Pediatric fellowship.
- Ideal preparation for sub-specialization
- Equally competitive with categorically trained candidates.
- Added maturity derived from an additional year of training and discipline
- Combined fellowships: subject to negotiation.

#### Fellowships After Med-Peds

- 1. Adolescent Medicine
- 2. Allergy-Immunology
- 3. Cardiology
- 4. Child Abuse
- 5. Clinical Cardiac Electrophysiology
- 6. Critical Care
- 7. Developmental-Behavioral
- 8. Emergency Medicine (peds only)
- 9. Endocrinology
- 10. Gastroenterology
- 11. General Medicine
- 12. General Pediatrics
- 13. Genetics
- 14. Geriatrics

- 15. Hematology-Oncology
- 16. Hospice and Palliative Care
- 17. Infectious Disease
- 18. Interventional Cardiology
- 19. Medical Informatics
- 20. Nephrology
- 21. Neurodevelopmental Pediatrics
- 22. Perinatology
- 23. Pulmonary
- 24. Rheumatology
- 25. Sleep Medicine
- 26. Sports Medicine
- 27. Toxicology
- 28. Transplant Hepatology

### Fellowship Choices: 1998-2002

Subspecialty	Number	Combined
Cardiology	33	13
Infectious Diseases	29	17
Allergy/Immun	21	
Primary Care	18	
Endocrinology	18	16
Adult Pulm/CC	17	
Peds ICU	17	
Nephrology	17	11
Heme/Oncology	16	11
Adolescent Med	11	N/A
Rheumatology	11	8
Pulmonary	10	8
Unknown	42	
Other	65	

Frohna J, Melgar T, Mueller C, and Borden S. Internal Medicine-Pediatrics Residency Training: Current Trends and Outcomes. Academic Medicine. 2004;79:591–596.

#### Fellowship Choices: 2003-2004

#### Med-Peds (91)

Infectious Disease: 19% (17)

Allergy: 11% (10)

**Critical Care: 9.9% (9)** 

Endocrine: 9.9% (9)

Neonatology: 1.1% (1)

Emergency Med: 3.3% (3)

#### **Peds (196)**

Neonatology: 16.3% (32)

Emerg. Med: 11.2% (22)

Heme/Onc: 7.7% (15)

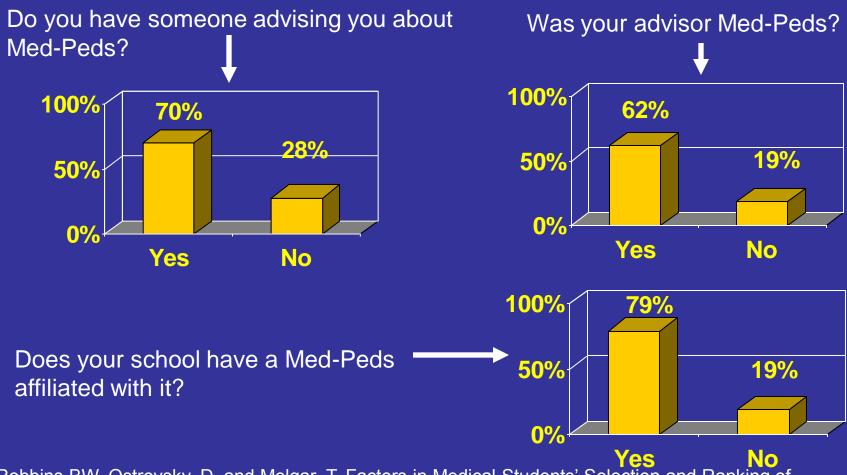
Infect Disease: 7.6% (15)

#### Why Medical Students Chose Med-Peds?

- 1. Age spectrum
- 2. Variety & depth of training
- 3. Liked both
- 4. Flexible career
- 5. Primary care focus

- 6. Ability to specialize
- 7. Role models
- 8. Did not want OB/Surg
- 9. Transition & adolescent
- 10. More Pediatrics

## Medical Students Who Choose Med-Peds



Robbins BW, Ostrovsky, D, and Melgar, T. Factors in Medical Students' Selection and Ranking of Combined Medicine-Pediatrics Programs. Academic Medicine. 80 (2), February 2005;199

#### Med-Peds Student Electives (www.med-peds.org)

Arizona:

**Banner Good Samaritan** 

California:

U.C.L.A.

**Delaware:** 

**Christiana Care Health System** 

**District of Columbia** 

Georgetown

Illinois:

**Rush & University of Chicago** 

**Kentucky:** 

**University of Kentucky** 

Louisiana:

**Tulane** 

Maine:

**Maine Medical Center** 

**Massachusetts:** 

**Baystate & Univ. of Mass** 

Michigan:

Michigan State @ Grand Rapids

Michigan State @ Kalamazoo

**William Beaumont Hospital** 

Missouri:

St. Louis University

**New York:** 

**Albany** 

**Stony Brook** 

**University of Rochester** 

**North Carolina:** 

**East Carolina University** 

Univ. of North Carolina

Ohio:

**Case Western Reserve** 

**Metro Health** 

Pennsylvania:

**Geisinger Health System** 

**South Carolina:** 

**Greenville Hospital System** 

Texas:

**Baylor** 

## How Students Chose a Med-Peds Program

- Intuitive feel (55%)
- Resident satisfaction (48%)
- Location/family (36%)
- Med-Peds clinic (32%)
- Coordination/cooperation (30%)

#### Summary of Med-Peds

- Depth and breadth of two disciplines that allows flexible career goals <u>without</u> Surgery and OB training. The perfect "double major"
- Four years of training that is rigorous but humane; gives added maturity to your career
- Wide variety of practice styles and settings; effective with variety of patient problems
- Dual board certification in Internal Medicine and Pediatrics that is unique
- Niches of special populations; cross fertilization of knowledge
- 40 years of rich history in Med-Peds