The Pediatric Examiner

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No Monkeying Around

Steve Downs was born in Denver, Colorado where his family has lived for four generations. He "grew up on skis" and had two pet monkeys as a child. You might expect someone like that to follow an unusual career path, and in many ways, Steve has. Although his academic emphasis in college and medical school was in biology and chemistry, at the end of medical school, Steve decided to enter the burgeoning field of medical informatics. That decision has made all the difference.

> "I have been incredibly lucky...I walked into an extremely fertile environment...I just have to keep the ball rollling."

Stephen M. Downs

"At Stanford Medical School," Steve says of his alma mater, "the curriculum was almost completely elective. They encouraged students to do something unusual with their studies. So every summer, I took a course that had nothing to do with medicine. At first, I took painting and drawing classes, but after my third year, I took a computer class. I thought 'Wow! You could really do something in medicine with this.'" So after two additional years of study, Steve became the first graduate of a brand new program called Medical Information Sciences.

With his MD and Master's degrees in hand, Steve moved himself, his wife and his two children to Chapel Hill, North Carolina where he completed a residency in pediatrics. At the end of residency, he completed a fellowship in the Robert Wood Johnson Clinical Scholars program, a program at UNC that emphasizes epidemiology, clinical research and health services research. He honed his skills in decision sciences and computer-based decision support. After fellowship, he remained on the UNC faculty for 10 years where he helped develop and ultimately directed the Duke-UNC Training Program in Medical Informatics. Steve held faculty appointments in Pediatrics, Biomedical Engineering and in the School of Public Health.

In 1999, Dr. Richard Schreiner, Chairman of the Department of Pediatrics at Indiana University, approached Steve about his vision for a health services research program at IU. Because his wife was still in graduate school at the UNC School of Public Health, Steve was not able to consider leading the program, but after two years of discussion and consideration, he was convinced that there was an opportunity here, unlike anywhere else in the country, to create a world class center for children's health services research.

He came to IU to start the program in September of 2001. Starting with a makeshift office in the old admitting office of the James Whitcomb Riley Hospital for Children, the Children's Health Services Research Program, now located on the 3rd floor of the Riley Research Wing, has five faculty, four staff members and nearly $5 million in grant funds.

"I have been incredibly lucky," says Steve. "I walked into an extremely fertile environment with lots of talented people. I just have to keep the ball rolling."

Moving to a new city was a challenge, but Indy has been lots of fun. Over the last year, the Downs family got to know the Indy sports scene. They attended Pacers, Colts, Fever, and Indians games, and the Indy 500. They've also enjoyed the Indy Jazz Festival, the Symphony, and several of the excellent theaters and restaurants in the city. Steve lives with his wife, Annie and two of his three children, Sarah-Mejia and Chè. His oldest son, David, lives in Carrboro, NC where he is studying design and technical theater.

2003 Works-in-Progress Sessions

Mar 11, 25	Aug 12, 26
Apr 8, 22	Sep 9, 23
May 13, 27	Oct 14, 28
Jun 10, 24	Nov 4, 18
Jul 8, 22	Dec 2, 16

Open dates are now available for presenting
For information about WIP, please call 278-0552
or email cmbonner@iupui.edu

April 8 and 22 WIP sessions are dedicated to the Pediatric Academic Society Meeting. If you would like to practice your presentation, please contact Chris Bonner at 278-0552.

Partnerships for Change-Dyson Initiative Community Pediatrics and a Medical Home for the Children of Indianapolis

Partnerships for Change (PFC-DI), Indiana University's Dyson Training Initiative for Community Pediatrics, is focusing on two components: 1)service learning through projects and 2)partnerships with community based organizations (CBOs) and quality improvement programs in continuity clinics.

The PFC's CBO partners are the Indiana Parent Information Network, an information and referral network for families of children with special healthcare needs (see next page), the Hispanic Education Center, an educational resource center for the burgeoning Latino population in Indianapolis, and the Julian Center, a shelter and counseling resource for victims of domestic violence with a police unit and a prosecutors office on site. Service learning activities through these organizations will give residents an opportunity to understand the relationships between their patients and their communities that can impact their health. The service learning curriculum emphasizes community assessment, program design principles and evaluation. Residents have had a central role in the collection of information from key informants in the community assessment phase of the projects.

Continuity clinic activities also focus on assessment of communities with the aid of a World Wide Web based geographic information system. Residents will use the Social Assets and Vulnerabilities Indicators (SAVI) database to examine a range of social characteristics affecting their communities and patients. SAVI is a comprehensive electronic database of mapped and tabular data about Indianapolis, Marion County and its eight contiguous counties. It was developed by the Polis Center at IUPUI, an academic research center with a focus on urban-related issues in neighborhoods, community planning, economic development, education, religion, and culture, and it is available free to the public at www.savi.org. Residents will use SAVI to assess communities served by their continuity clinics and by the CBOs with whom they work. Using simple and spatial queries residents will be able to view information that will help assess morbidities, vulnerabilities and assets of their communities and where prevention and intervention may be targeted.

Supervised by PFC-DI faculty, residents design quality improvement projects intended to make their clinics medical homes for the children of their communities. Because the continuity clinics at IU are conducted in a network of practices across Indianapolis, clinics will be brought into the PFC program stepwise, 4 clinics per year. This will create a natural experiment in which clinics participating in the initiative can be compared to those that have not yet been included. A toolbox to enable residents to provide a high quality Medical Home to their patients and families is also being developed.

PFC-DI faculty are designing Structured Observation Tools called Passports for each experience in the Community I and Community II block rotations where much of the community pediatrics competencies are taught. These will be evaluated in the next 6 months. In addition, community based and university based faculty are designing a Cultural Effectiveness curriculum that will be integrated into many experiences throughout residency and use visual and literary images to teach residents.

An experienced and enthusiastic Advisory Board to the PFC-DI has had its first meeting and will continue to meet on a regular basis to advise the community based and university based faculty on the direction of the Inititative. A site visit by Tom Tonniges, M.D., the Technical Assistance Team representative for PFC-DI and Grace Chi from the National Program Office, as well as the cross site evaluation team, yielded much constructive feedback and baseline evaluation data.

From left to right: Dolly Schutte, Resident; Jeremy Roscoe, Resident; Cathy Luthman, Project manager; Mary Ciccarrelli, IUSOM; Phil Siefkin, IUSOM; Sister Therese Whitsett, Director Hispanic Education Center; Carleen Miller, Julian Center; Nancy Swigonski, IUSOM; Donna Olsen, Ex Dir. Indiana Parent Information Network; Janet Shultz, research assistant; Linda Hankins, IUSOM; Sarah Stelzner, IUSOM; Dawn Haupt, IUSOM; Mary Beth Riner, IU School of Nursing; Alex Djuricich, IUSOM; Stephen Downs, Director Pediatric Health Services Research; Dianna Fox, IUSOM; Karen Yoder, IU School of Dentistry Not Pictured: Karen Amstutz, MD Wise; Marilyn Bedford, Julian Center; Jeff Dean, School of Dentistry; Dana Lynn HIller, IUSOM; Abby Klemsz, IUSOM; Deanna Reinoso, IUSOM

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Resident Spotlight

Research in Health Services provides an amazing opportunity to look at almost any subject in medicine that interests you. One year of Kris Madsen's residency will be dedicated to research and she encourages all residents with an interest in research to look into it. Following is a list of reasons to participate.

10. Instant expert on your subject
9. Company car*
8. Affecting a large population
7. Opportunity to travel
6. Working with brilliant people
5. Build your CV
4. Call-free**
3. Good work hours
2. Improving care for children
1. Free beer*

**Simply not true but it would be really great.*

***True if you have research experience and fast- track.*

Please call 278-0552 if you have any questions or would like more information on doing research while in residency.

Indiana Parent Information Network, Inc.

As part of the Children's Health Services Research program's $2.35 million Partnerships for Change Dyson Initiative, we have partnered with three community based organizations that serve children in Indianapolis. One of these is the Indiana Parent Information Network, Inc. (IPIN) IPIN is an organization of parents and professionals that was founded in Indianapolis in March, 1987 by two parents and two professionals. The mission of IPIN is *"Supporting children with special needs and their families by providing information, peer support and education, and building partnerships with professionals and communities."* Since 1987, IPIN activities have included state policy development and family involvement in: the implementation of early intervention services for infants and toddlers with special needs; the establishment of Indiana Medicaid rules to allow for the waiver of parental income for home and community-based services; the development of the Indianapolis Medical Home Project with parents and physicians working together to link families with appropriate community resources; the development of a comprehensive child care plan for *all* children as grantee for Healthy Child Care Indiana; and the establishment of the Indiana Center for Family, School and Community Partnerships.

As a 501(c)(3) not-for-profit parent organization, IPIN is overseen by a Board of Directors, which is made up of a diverse group of parents and professionals who represent the interests of families throughout the state of Indiana. More than 51% of the board of members are parents of children with disabilities and special health care needs. Professionals who are on the Board represent the perspective of special education, James Whitcomb Riley Hospital for Children, and the American Academy of Pediatrics, Indiana Chapter. The entire board meets quarterly to review and provide direction to project operations, activities, and plans.

IPIN has been involved with the training of pediatric residents at the Indiana University School of Medicine since 1998. IPIN's work focuses on 1) increasing the awareness of the pediatric residents about the needs of families of children with disabilities and serious chronic illness; 2) the role of parent to parent programs and parent directed organizations in meeting those needs; and 3) the opportunity for partnership between theses programs and organizations and physicians in the community and in the tertiary care center. Because families have identified the need for information about financial resources as well as community resources as their greatest need, IPIN works with residents to identify Community-Based Organizations that are available to physicians to assist them in linking families in their community care clinics as well as in their future practice. IPIN has seen an increase in referrals of families by physicians in training.

During 2001, IPIN responded to over 5,000 telephone calls, mailed or distributed almost 50,000 pieces of information (including a quarterly newsletter to a mailing list of more than 10,000 parents and professionals), and provided information, support and personal assistance to 1,500 families and professionals.

Look Who's Dropped Anchor

The newest addition to our faculty, Marc Rosenman, is a graduate of the pediatrics residency program at Riley Hospital for Children. He recently completed a fellowship in pediatric health services research and informatics at Regenstrief Institute. Marc's research has focused on utilizing the Regenstrief Medical Records System in clinical epidemiologic studies; one project—with mentors Drs. Mahon and Kleiman—was an analysis of the association between erythromycin exposure and pyloric stenosis. Other interests include prediction rules (Marc has worked with Dr. Madsen to study predictors of bacteremia), decision analyses (he is working on one with Dr. Downs), and the health policies of governments (mentored by Dr. Swigonski).

He enjoys teaching in a number of settings at IU School of Medicine, including in the 1st, 3rd, and 4th year medical student curricula, and in the 1st year course for fellows and junior faculty in the Master of Science in Clinical Research program at Regenstrief.

Marc is delighted to be joining the Children's Health Services Research section and looks forward to working productively with everyone on the team. He also looks forward to collaborating with other faculty, fellows, and residents throughout the Department of Pediatrics—he has fond memories of the faculty from his years as a resident. In addition, he will continue to develop research and curricular initiatives with colleagues at the Regenstrief Institute.

Marc was born within walking distance of Wrigley Field, lived even closer to the ballpark, and went to his first game at the age of 3. By the age of 6, he was spending afternoons alone, throwing and fielding high bounces off a brick wall in the alley behind the apartment; he remembers being adept by that age at crawling underneath parked cars to retrieve errant baseballs. One night at Candlestick Park he and his friends sent a note up to Harry Caray, who read their names on the air. Please join us in welcoming Dr. Rosenman on board!

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By providing residents with linked experiences in their own clinics and with CBOs, the PFC Dyson Initiative has begun to train residents who feel empowered to practice community pediatrics and understand that community pediatrics is an integral part of their training and profession. Finally, the natural experiment created by staged implementation will provide an opportunity to prove it works.

CHSR Submissions: 2003 Pediatric Academic Society

HSR recently submitted several abstracts for presentation this coming May in Seattle at the Pediatric Academic Society's 2003 Annual meeting. The research described in the abstracts covers a wide range of topics: health policy, epidemiology, decision analysis, diagnostic testing, and graduate medical education.

1. *Parental Risk Attitudes in Medical Decision Making,* **Stephen Downs, Gilbert Liu, Lee Ann McKelvey**. "Risk attitude" describes one's willingness to accept a poor outcome with certainty rather than take a risk of a worse outcome in order to get a better outcome. 214 parents were interviewed to assess parents' risk attitudes when making decisions affecting their children's health. surprisingly, the most common risk attitude pattern observed in this study is almost never seen in adults making medical decisions for themselves. The parents studied placed high value on avoidance of death, but relatively little value on incremental increases in life expectancy.

2. *Neighborhood Socioeconomic Status and Childhood Obesity,* **Gilbert Liu,** Sharon Kandris, Chandan Saha, David Marrero, **Stephen Downs**. The prevalence of overweight in U.S. children is rapidly rising and environmental factors underlie much of this trend. A cross-sectional study of 2,483 children was performed to examine the association between neighborhood socioeconomic factors (income, crime, education, and single-parenting) and obesity prevalence. This study found that children living in communities with greater SES disadvantage have an increased risk of obesity.

3. *Asthma, Obesity, and Neighborhood Socioeconomic Status,* **Gilbert Liu**, Chandan Saha, **Stephen Downs**. The associations between asthma, obesity, and neighborhood socioeconomic status are poorly understood, and represent an important area of study for designing prevention efforts that target environmental factors. A cross-sectional study of 2, 483 children was performed to examine the association between neighborhood socioeconomic factors, obesity, and asthma prevalence. This study found that children who are obese or live in neighborhoods with greater socioeconomic disadvantage have an increased risk of asthma.l

4. *Utility of C-reactive Protein in Febrile Infants 29 to 90 Days Old,* Jason Kane, **Marc Rosenman**, James Conway, Martin Kleiman. Quantitative serum C-reactive protein (CRP) has been found to aid in the evaluation of febrile children but all age groups have not been adequately studied. 42 infants were prospectively enrolled to determine whether CRP could help differentiate SBI from non-bacterial illnesses in febrile infants 29 to 90 days old. Among 28 to 90 day old infants with fever and no localizing physical findings, the mean CRP was significantly higher in patients with SBI than those with non-bacterial illnesses. CRP predicted SBI better than other screening tests, but CRP <=1.0 mg/dL did not fully exclude SBI.

5. *Exposure to Chlamydia Trachomatis in a Birth Cohort,* **Marc Rosenman**, Barbara Mahon, Eve Montgomery. Genital infection with *Chlamydia trachomatis* affects 2 to 37% of pregnant women. Infants exposed at delivery may develop pneumonia or conjunctivitis. A cohort of infants exposed to *C. trachomatis* was retrospectively identified to assess 1) obstetricians and pediatricians awareness of positive intrapartum maternal chlamydia tests, and 2) potential consequences of neonatal chlamydia exposure. Documentation by obstetricians and pediatricians of positive intrapartum maternal chlamydia tests was frequently absent in the medical record. Infants who were not treated with erythromycin prophylaxis may have had a higher rate of hospitalization for chlamydia pneumonia.

6. *The Use of Passports (Structured Observation Tools) to Improve Knowledge, Attitudes and Behavior of Pediatric Residents in a Community Pediatrics Rotation,* **Sarah Stelzner, Nancy Swigonski**, Mary Ciccarelli. Structured observation tools (Passports to Learning) are intended to clarify resident goals and objectives for experiential learning activities in a Community Pediatrics rotation. Assessment questions on passports serve as triggers for weekly reflection sessions with faculty. Pre and post rotation questionnaires were administered to 18 residents as they participated in community educational experiences to assess the effect of passports on resident self-reported knowledge, attitudes and behaviors. The use of passports showed augmentation of the Community Rotation to improve resident knowledge, attitudes and behaviors regarding vulnerable patient populations.

7. *Special Education and CSHCN Enrolled in a State Title V Program Coordinator,* **Nancy Swigonski**. The American Academy of Pediatrics, the Ambulatory Pediatric Association, and the Maternal Child Health Bureau have defined roles for pediatricians in providing a medical home for children with special health care needs (CSHCN) that includes coordinating and communicating with schools. Surveys from 364 families of CSHCN were examined to assess the relationships between health status, demographics, and receipt of special education. Satisfaction with educational services was also assessed. Males, younger children, and those in poorer health were more likely to be in special education. Special education was associated with higher caregiver satisfaction.

8. *Dental Access and Need in CSHCN Enrolled in a State Title V Program Coordinator,* **Nancy Swigonski, Dori Smith**, Eileen Kramer. Low-income children have a disproportionately high burden of dental caries. Children with special health care needs (CSHCN) are at increased risk for a variety of oral health problems. Surveys from 591 families of CSHCN were analyzed to assess access to dental care and identify barriers to dental care. More than 1/7 of the CSHCN had never seen a dentist, and an additional 1/7 had significant problems in accessing care. Very few CSHCN identify a usual source of dental care. Age is a barrier both to entry and ongoing care, whereas insurance is a barrier to entry.