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OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

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Pediatrics 2008;121;390-401

DOI: 10.1542/peds.2007-1176

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<http://www.pediatrics.org/cgi/content/full/121/2/390>

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Creating a Faculty Development Office in an Academic Pediatric Hospital: Challenges and Successes

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The authors have indicated they have no financial relationships relevant to this article to disclose.

FACULTY in academic medical centers are challenged by demands for excellence and productivity in clinical care, research, and teaching. The increased competition for National Institutes of Health grants, the creation of new medical school curricula and residency competencies, and the multitude of quality and cost measures for clinicians have resulted in new stresses among academic faculty of all ranks. The expectations for productivity often conflict with the desire of young faculty to achieve a work-life balance and can jeopardize faculty "vitality."¹⁻³

The dramatic increase in women graduating from medical schools in the past 2 decades has resulted in increasing percentages of women at the lowest academic ranks but with only a modest change in the percentage of women at professorial rank, which is currently 16% across US medical schools.⁴ Although female scientists and medical faculty in general face a number of barriers related to childbearing and bias,⁵⁻⁷ the future of academic pediatrics is likely to be particularly affected because of the high percentage of women entering this specialty. As of 2003, 70% of pediatric residents and 63% of pediatricians who took the boards for the first time were women.^{6,8} In contrast, 37% of current pediatric subspecialists are women.⁸ In a survey of women faculty at Stanford in 2001-2002, McGuire et al⁷ found that the highest-ranked needs were for a flexible work environment without adverse consequences for women with children (including part-time appointments, child care, ability to attend school events, etc); a 3-month sabbatical from administrative and clinical duties to write grants and papers; mentoring; and administrative support for manuscript preparation. Indeed, the authors of 2 commentaries in *Pediatrics* recently called for significant changes to make pediatric careers more family-friendly⁹ and to provide part-time options, child care, flexibility for physician scientists, and leadership training.¹⁰ In addition to the challenges faced by women, there remains a dearth of minority faculty in academic centers. Even those who do succeed may experience isolation and less satisfaction within their profession.¹¹⁻¹⁴ If pediatric academic centers are going to recruit and retain the best faculty, specific programs are needed to address the career development of all faculty. Given the changing demographics and the benefits of a diverse academic com-

munity,^{12,15} initiatives must also have a special focus on women and minorities.

Over the past 2 decades, a number of medical schools have addressed specific issues of faculty development through fellowships targeted at research or teaching, workshops, mentored projects, and leadership courses.¹⁶⁻²⁶ Some departments have undertaken specific mentoring programs or instituted changes in policies and programmatic efforts designed particularly to improve the career development of women or minority faculty.²⁷⁻²⁹ However, as of 2000 only 20% of 76 medical schools that responded to a survey had an office devoted to faculty development, and no school reported a truly comprehensive faculty development program.³⁰

In 2001, to address the myriad challenges experienced by faculty, the changing demographics of junior faculty in pediatrics, the low percentages of women in higher academic ranks, and an institutional commitment to providing resources to retain excellent faculty, we created a comprehensive faculty development program for all faculty across a pediatric institution. In this commentary we describe the phases and processes of change, the components of the program focused on institutional and individual vitality, the evaluation strategies, and the ongoing challenges. We view our Office of Faculty Development (OFD) as an evolving model with components that may be helpful to other pediatric centers addressing these same issues and as a starting point for dialogue across pediatric academic centers for developing best practices.

Abbreviations: HMS, Harvard Medical School; CHB, Children's Hospital Boston; CEO, chief executive officer; COO, chief operating officer; FTE, full-time equivalent; CV, curriculum vitae; URM, underrepresented minority

Opinions expressed in these commentaries are those of the author and not necessarily those of the American Academy of Pediatrics or its Committees.

www.pediatrics.org/cgi/doi/10.1542/peds.2007-1176

doi:10.1542/peds.2007-1176

Accepted for publication Jul 12, 2007

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PHASE I: BACKGROUND AND NEEDS ASSESSMENT

Harvard Medical School (HMS) has >10 000 faculty and 18 affiliated teaching hospitals and institutions. Over the past decade, faculty development programs have been created at 4 teaching hospitals, including Children's Hospital Boston (CHB). In 2000, at the request of the CEO, the current director (Dr Emans) first met with each of the 15 department chairs to define the challenges facing all faculty, with a focus on the special issues of women and minority faculty, and to design a framework to foster faculty development and retention. The chairs articulated a number of themes and initiatives that they believed would be helpful to faculty: (1) centralized resources; (2) access to more clinical research training and statistical consultation; (3) a mentoring framework; (4) teaching workshops; (5) a better understanding of the promotion process; (6) junior faculty career development awards; and (7) attention to the challenges, particularly of women, in balancing careers and families. Second, data on the number of CHB faculty, academic rank according to gender and race/ethnicity, and promotions were reviewed. In 2001, similar to other academic institutions, women represented 42% of the CHB faculty; 12% of professors, 21% of associate professors, 34% of assistant professors, and 54% of instructors were women. Finally, the literature reviewing the issues of women and minority faculty and initiatives in faculty development undertaken by other medical schools and departments, such as the effort to improve women's careers in the Department of Medicine at Johns Hopkins University School of Medicine²⁵ were catalogued. The themes enumerated by the chairs, demographic data, and the literature review were presented to the department chairs and, with the strong support of the CEO and COO, to the Board of Trustees, which endorsed the establishment of an OFD. Because retention of excellent, satisfied faculty is more cost-effective than recruitment,¹⁷ the business case and the professional need for creating such an office were compelling. The goals of the new program, launched in spring 2001, were to (1) recruit and retain the best faculty, (2) facilitate career advancement and satisfaction, and (3) increase leadership opportunities for faculty, particularly for women and minorities.

PHASE II: CREATING AN OFD

The initial infrastructure of the OFD included a 0.35 full-time equivalent (FTE) faculty director, a 1.0 FTE administrative director, and a 1.0 FTE administrative assistant, serving ~900 faculty. An advisory committee was established with the inclusion of 28 faculty from all levels (instructors to chairs), across departments, with significant representation of women (18) and minorities (5). Collaborations were established with the Research Executive Committee and the hospital-based Clinical Research Program. Communication was the first priority and included a newsletter (*Perspectives*), Web site (internal and, subsequently, external), and targeted e-mail distribution lists for inviting faculty to events and workshops. An initial kickoff celebration, reinforced with the release of the first issue of the newsletter, gave faculty an

understanding of this new initiative. A critical part of the office was a partnership with the department/divisional chiefs, who were asked to review drafts of materials; provide departmental mentoring in research, teaching, and clinical care; develop or continue annual career conferences; define leave policies; ensure salary and promotion equity; and serve as teachers in the workshops. This partnership was further facilitated by CEO support for the goals of the office, the selection of a director who had a collegial relationship with the chiefs, a compelling needs assessment that provided metrics for monitoring, and annual reviews of department/division achievements. The OFD Director reports directly to the COO and CEO, is a member of the Medical Staff Executive Committee (which meets monthly), and presents data on progress annually.

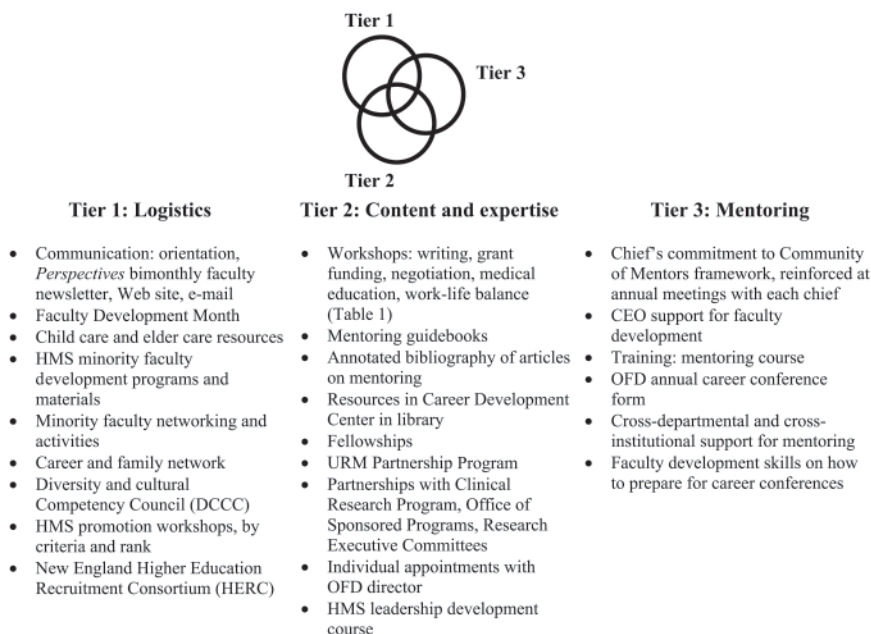
PHASE III: IMPLEMENTING THE COMPONENTS OF A FACULTY DEVELOPMENT PROGRAM

The goals of the new OFD program were to meet the needs of a faculty with diverse interests and levels by fostering academic advancement; providing skill-building workshops; establishing a "climate of success" through a mentoring network; promoting excellence in teaching; and supporting work-life balance and diversity initiatives. The components are grouped under 6 domains: OFD framework and mentoring, skills-building seminars, promotion, work-life balance, diversity, and tools for accomplishing the mission for the office. A number of aspects of the program have subsequently been evaluated (see "Phase IV: Ongoing Evaluation Strategies" below).

OFD Framework and Mentoring

Through consultation with the department chairs, the Advisory Committee, and previous CHB awardees of mentoring awards, the OFD developed a framework for the academic development of faculty that recognized the critical role of mentoring by naming it the "Community of Mentors." This framework is 3-tiered and runs the spectrum from providing basic and necessary logistic information in tier 1 to skill-building workshops in tier 2 and to enabling committed professional relationships in tier 3 (Fig 1). The OFD sponsors workshops (as part of tiers 1 and 2), identifying experts (often chiefs) in various content and process skill sets (see "Skill-Building Seminars" below), and then further disseminates "take-home messages" through the newsletter and Web site. The Community of Mentors reinforces the notion that most faculty will need more than 1 mentor. In addition to the 3-tier framework, the program has recognized the developmental needs and life-cycle stages of faculty and uses a model that was modified from the work of Viggiano² (Fig 2) to target specific activities and workshops. The model assumes that faculty are recruited, often internally from residency and fellowship programs, are oriented in professional goals, and go through stages of exploration, engagement in their work, and individual accomplishment. Over time, goals widen to include mentorship of others, leadership, and finally a retirement enriched by the knowledge of these contributions

FIGURE 1
Framework for OFD programs: Community of Mentors.



to individual and institutional “vitality.” If life challenges become too much, such as coping with the illness of a child or parent, the faculty member may become disengaged and then require a change in tempo (such as part-time or flex-time) to become a contributing faculty member again. “Faculty vitality means the ongoing realization of goals. This is a career-long journey, not a destination.”² Education of chiefs and senior faculty

about the desire of junior faculty to achieve more balance in work and life^{3,9} and hospital funding of career development fellowships (see below) have promoted a climate that supports individualized career planning. Appointments with the OFD Director have also helped junior faculty reframe their requests before meeting with their chief.

Junior faculty are strongly encouraged to establish a relationship with a mentor or a mentor team, with oversight of their department/division chief (www.childrenshospital.org/cfapps/research/data_admin/Site2209/mainpageS2209P1.html). In the optimal prototype, the process begins with a mentor appointed in the initial offer letter at the division or department level for the first year and guides mentees to think more broadly about a hospital-wide community of mentors. Over time, junior faculty are empowered to create their own mentor team with the advice of their division/department senior faculty. The OFD has developed two 8-page mentoring guidebooks (1 for junior faculty and 1 for mentors) that explain the basic steps of the mentoring process and the roles and responsibilities of both the mentor and the mentee. Since 2003, the OFD has collaborated with 2 other hospital programs to develop an annual course on mentoring, “How to Become an Effective Mentor,” to encourage senior faculty to think about the value and challenges of mentoring, including negotiation of faculty problems and mentoring across race and gender boundaries. Recognizing that some faculty who desire a mentor might not have a robust mentor team, the OFD piloted a matched mentor program in January 2005. The 15 faculty who requested mentors were matched with senior faculty on the basis of a brief faculty preference profile.

The OFD designed a template for an annual career conference form (www.childrenshospital.org/cfapps/research/data_admin/Site2209/mainpageS2209P7.html); com-

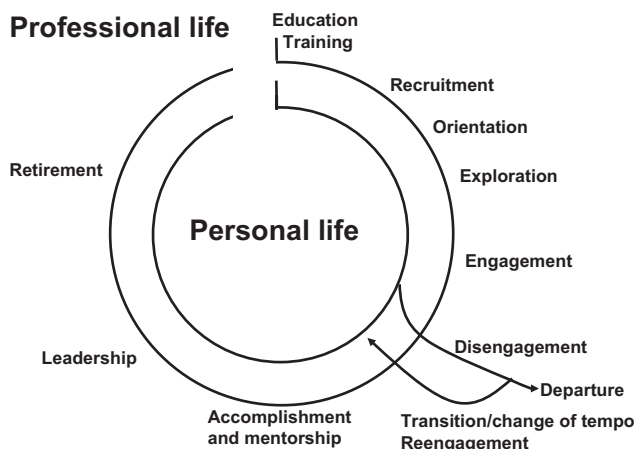


FIGURE 2
Faculty vitality: a model of the developmental trajectory of academic medical faculty. The model assumes that junior faculty are recruited either internally from residency and fellowship programs or externally, are oriented in professional goals, and go through stages of exploration, engagement in their work, and individual accomplishment. Over time, goals widen to include mentorship of others, leadership, and finally a retirement enriched by the knowledge of these contributions to individual and institutional vitality. Personal life, depicted in the center, strongly influences the professional trajectory. If personal challenges become too much, such as coping with the illness of a child or parent, the faculty member may feel disengaged and then require a change in tempo of professional life demands to become a contributing faculty member again. (Modified from Viggiano T. *Career Management for Individual and Institutional Vitality: A Life Cycle Model for Professional Development*. Presented at the Harvard Macy Institute Program for Leaders in Healthcare Education: Boston, MA; June 14, 2005.)

TABLE 1 OFD Workshops and Programs

Medical education seminars
Teaching reflective practices
Assessing communication skills
Turning educational projects into scholarship
Developing curricula
How doctors learn: simulation in medical education
Web-based curricula: challenges and innovations
Teaching in the clinical arena
Presentation skills: key components of strong scientific presentations
PowerPoint presentations: enhancing your teaching presentation
Work-life balance
Restoring work-life balance: techniques and strategies
Child-care options: nanny or day care?
Time-management strategies
Stress management: causes and strategies
Financial planning
Career and family networking group
Career enhancement
Promotion workshops
Orientation for new faculty
Faculty development month
Preparing for your annual career conference
Negotiation
Leading a meeting
Leadership development for physician and scientists
Mentoring course
Skill development
Scientific writing
Getting your basic science funded through the K series
Getting your clinical research funded through the K series
Preparing your National Institutes of Health budget
Designing surveys and questionnaires
Special events
“If Women Ruled the World,” PBS film and discussion
“A Lady Alone,” a 1-woman, 1-act play about Elizabeth Blackwell, MD
Luncheons and celebration for URM faculty and fellows

pletion of the form is encouraged across the institution. The form includes specific questions on last year's goals and accomplishments (clinical, teaching, research, community service, taskforces, grants, publications), a specific question about mentors, and questions about goals and needed resources. The chief or designee reviews the completed form with the faculty member and outlines goals and resources for the following year; the form is intended to be signed by the chief and junior faculty member. To assist younger department members in viewing the session more as a professional opportunity for career development than as an intimidating evaluation, the OFD has created a workshop to help faculty meet effectively with their chief and a list of tips that includes “career conference homework” and “how to discuss your progress with your chief” (www.childrenshospital.org/cfapps/research/data_admin/Site2209/Documents/Tips_CareerCo.doc).

Skill-Building Seminars

The OFD sponsors skill-building workshops, networking sessions, and other programs (Table 1). The curriculum is designed annually on the basis of recommendations

from the Advisory Committee, the chiefs, requests received from junior faculty (evaluations, e-mails, and conversations), and, in the area of medical education, an online survey of topics desired. The OFD identifies experts, usually within our medical center, in various content areas. The most popular time for workshops is 12:00 to 1:00 PM, with lunch provided. For those departments in which this time is problematic, additional workshops have been developed at early-morning and late-afternoon times. In addition, the OFD has collaborated with the Clinical Research Program, which has an annual 3- to 4-day course on clinical research, statistics, and scholarly writing.

Orientation

The annual career development orientation for new faculty, even those who did their training at CHB, is an important recognition of the developmental trajectory of faculty. The orientation is designed to establish a “climate of success” for faculty early in their career at CHB. Senior administration, including the CEO, Chief Scientific Officer, chairs of the Clinical and Basic Science Research Executive Committees, Vice President of Research, Director of the Office of Clinician Support, Senior Librarian, and OFD Director welcome junior faculty and outline programs. Junior faculty receive an orientation manual and Community of Mentors guidebooks.

Medical Education Programs

Over the past 5 years, the OFD has included a number of seminars to promote faculty development in education and teaching (Table 1). In 2006, a 0.2-FTE faculty position shared by HMS and CHB was added to the OFD to increase the focus on teaching. The goal was to identify a cadre of medical educators in all the departments.

HMS Leadership Development Course for Physicians and Scientists

Leadership is another important stage in the developmental trajectory of faculty and an important component of faculty development. In 2003, the directors of the offices of faculty development and women's careers offices at 4 HMS teaching hospitals (CHB, Beth Israel Deaconess Medical Center, Massachusetts General Hospital, and Brigham and Women's Hospital) and HMS Faculty Deans' offices created a 2.5-day leadership development program for junior faculty who currently had responsibility for a small research grant, laboratory, course, or clinic. The goal was to create a course to develop early stage leaders rather than impart these skills after a faculty member had already assumed a role as a division or department chair. The course has been given annually, and 60 to 65 diverse faculty are selected by the course directors. The lead-off discussion is a well-received panel of 5 hospital CEOs. Participants acquire skills in institutional organization, health care economics, legal and regulatory issues, and communication skills. Strategies and leadership principles are reinforced throughout the course and culminate with personal action plans (www.childrenshospital.org/cfapps/research/

data_admin/Site2209/Documents/PAPlan-revised.doc) for participants' leadership goals. Networking provides an expanded community of colleagues across all the hospitals. A follow-up 2-hour "leadership café" with a noted lecturer is held annually 6 months after the course. This café program serves as a reunion and a reminder of personal action strategies.

Promotion

Demystifying the promotion process and criteria is critical for junior faculty. Annually, 4 to 5 seminars are held, with individual sessions divided by rank (eg, instructor to assistant professor) and criteria (clinician-teacher, investigator). Each of these workshops is moderated by the OFD Director with presentations by a representative from HMS Faculty Affairs and, importantly, the chief of one of the CHB departments who can give his or her perspective on the promotion process. Faculty can also meet individually with the OFD Faculty Director, HMS Faculty Affairs deans, and a former HMS dean consultant who can review their curriculum vitas (CVs) and readiness for promotion (see also "Selected Tools for OFD Efforts" below). Unlike many medical schools, faculty at the HMS teaching hospitals do not have a tenure clock, which is a significant advantage for faculty with family responsibilities. In addition, faculty who work part-time (>0.5 FTE) only in a teaching hospital (no outside employment) can maintain their full-time academic appointments.

Work-Life Balance

The OFD has begun to address the challenges felt by many faculty related to family responsibilities by developing a paid postpartum leave policy for faculty in 2001, providing seminars and fellowships, working with chiefs and faculty to create part-time opportunities, celebrating Women in Medicine month, and creating a networking group. The Career and Family Networking Group provides "peer-mentoring" luncheons hosted by 2 CHB women junior faculty with the goal of encouraging professional and personal growth in problem solving and developing life strategies. Other activities include family outings, an Internet bulletin board, and collaborations with the library on book discussions such as Dr Richard Ferber's *Solve Your Child's Sleep Problems*. The launching of the New England Higher Education Recruitment Consortium Web site (www.newenglandherc.org) in 2006, with Harvard University support, has also increased resources for families and dual-career couples.

Diversity

The OFD supports initiatives in cultural competency and diversity. Among programs for minority faculty and fellows are (1) the addition in 2006 of a 0.2-FTE minority faculty member to co-chair the hospital-wide Diversity and Cultural Competency Council and to lead faculty workforce and cultural competency training initiatives, (2) fellowships for underrepresented minority (URM) faculty, (3) sponsorship of 1 or 2 faculty each year to participate in the Partnership Program, a Boston-area

program that provides mentoring and professional development for professionals of color, (4) luncheons for URM faculty, fellows, and HMS students, including an annual Martin Luther King breakfast, (5) mentor guidelines that specifically address differences, (6) a dedicated column on diversity and cultural competency in *Perspectives*, (7) meetings with chiefs to review faculty diversity, (8) collaborations with the HMS Office of Diversity and Community Partnership, and (9) tracking of promotion data.

Selected Tools for OFD Efforts

Communication Strategies

The OFD publishes a bimonthly newsletter, *Perspectives* (which is also on the external Web site), communicates with faculty by e-mail distribution lists, and has developed an external Web site to broaden its audience (www.childrenshospital.org/cfapps/research/data_admin/Site2209/mainpageS2209P0.html). *Perspectives* summarizes seminars to provide take-home messages on mentoring, medical education, and leadership development for all faculty. "Leisurely Learning" provides suggestions for excursions to local cultural and recreational resources, and "Boston Bites," written by faculty member L. A. Shrier, MD, PhD, provides restaurant reviews. The OFD also provides updates of faculty accomplishments to "Faculty News," an e-mailed monthly publication of the CEO, as well as promotional flyers, mentoring guidebooks, tips sheets, and frequently asked questions.

Career Development Research Fellowships

Established in 2002, the CHB faculty career development fellowships, funded by the hospital research executive committees, provide transitional funding to sustain research productivity and career growth during critical years. In the first 4 years, these fellowships were targeted exclusively to junior faculty with family responsibilities (primary caregiver for children or parents) or to URM, providing 2 fellowships each year of \$30 000/year for 2 years. In 2006, the awards were increased to \$50 000/year for 2 years, and 9 unrestricted awards were added; in 2007, there were 3 restricted and 7 unrestricted awards (with many of the unrestricted awards also won by junior faculty with family responsibility). In 2004, 2 career development postdoctoral fellowships (\$30 000/year for 2 years) were established for basic science fellows who were the primary caregivers of children. The CHB fellowships were modeled after (and subsequently included in) the HMS Eleanor and Miles Shore 50th Anniversary Fellowships, which were created in 1995 and named in 2004 to celebrate the admission of women to HMS.

May Is Faculty Development Month

Beginning in May 2004 and repeated annually, the OFD, in a unique partnership with the CEO, declared the month of May as "Faculty Development Month." The major focus during this month is to encourage annual career conferences, improve career satisfaction, and facilitate advancement for junior faculty. All communications and flyers include the icon of a handshake, which

symbolizes the partnership between chiefs and junior faculty. Technical workshops help junior faculty prepare their HMS CV on line. In addition, the OFD encourages all faculty to review the mentor guidebooks; to identify mentors; to set goals; to investigate resources from the library's faculty development section; to write an article; or to introduce themselves to a colleague who shares their research or clinical interests. Sessions on strategies for work-life balance are an important part of the month, because time-management issues are often central to the success of junior faculty.

Faculty Director Meetings With Department/Division Chiefs

Each year, the OFD Director meets with division/department chiefs individually to discuss the promotion record of each faculty member (monitoring, in particular, faculty at rank for >7 years) and gender/ethnicity data, share best practices, advise on leave policies, educate about the realities of work-life balance for young faculty and suggest part-time or flex-time career paths, obtain needs assessments, discuss challenges and successes of annual career conferences, inquire about mentoring support, review principles of searches, and highlight faculty who have attended leadership conferences or received career development awards. When a new chief arrives, both the OFD Director and a former HMS assistant dean consultant provide a welcome, an orientation, and information on resources and the mission of the OFD.

Meetings With Individual Faculty Members

The OFD Director meets with individual faculty members to discuss their career trajectory, critique their CVs, advise on appropriate mentors, projects, and teaching, and reframe requests for resources. Faculty can also review CVs and promotion criteria with HMS Faculty Affairs deans and a former HMS assistant dean consultant. The OFD Director actively helps departments recruit prospective faculty members in individual meetings or telephone interviews. The HMS consultant also works with chiefs on promotion issues and other academic concerns and is available for departmental workshops.

PHASE IV: ONGOING EVALUATION STRATEGIES

Evaluation of aspects of the OFD programmatic efforts has been critical for advocating for change and adding new initiatives. The evaluation has included a survey that examines associations of annual career conferences and job satisfaction (Table 2), evaluation of the pilot Matched Mentoring Program, participant ratings of seminars, promotion data, survey of departments about part-time faculty, and follow-up of faculty who received career development fellowships or completed the leadership course.

Career Conferences and Mentoring

In December 2006, CHB faculty who provided any ambulatory care were asked to participate in an online survey with 31 items drawn from 50 items of the British National Health Service National Staff Survey³¹ about job

TABLE 2 Evaluation Strategies for Components of the OFD Program

Components of the OFD Program	Evaluation Strategies
Mentoring and career conferences	2006 survey of faculty physicians: 76% had career conference within 2 y; higher quality of life and less pressure of work for those who had had a career conference Qualitative feedback at 12 mo of the pilot Matched Mentoring Program Participant scores on joint mentoring course of 1.6 of 5 (with 1 being the highest)
Skills-building seminars	Well attended, equal gender representation; participant scores of teaching effectiveness of 3.7 of 4.0 (with 4 being the highest) HMS leadership development course: 3.5 of 4.0 (with 4 being the highest); 2007 survey: 89% of CHB respondents took on a new leadership role; 26% were promoted, 20% were in process of promotion
Promotion	Seminars and individual meetings were well attended Increased promotion of men, women, and minorities from 3 y before the OFD compared to 3 y after OFD Percentage of each rank who are women: significant gains for women at assistant and associate professor rank from 2001 to 2006
Work-family balance and part-time careers	Paid postpartum leave Well-attended seminars and activities Survey of departments on part-time faculty (0.5–0.95 FTE): 77% of departments had part-time faculty; no difference in benefits; deterrents to part-time included malpractice insurance, size, and research funding
Diversity	Percentage of each rank who were Asian/URM: significant gains for Asian faculty at assistant and associate professor but not for URMs; qualitative follow-up of a small number of participants in the Partnership Program: successful engagement and leadership
Tools/fellowships	29 awards; tracking trajectory; 4 departmental fellowships

satisfaction, quality of work-life balance, communication, support from administration, and stress/pressure of work (scored on a scale of 1–5, where 5 indicated the most positive response and 1 the least positive), career conferences, and open-ended questions. The response rate was 45% (238 of 534), and gender representation was reflective of the CHB faculty (54% male, 46% female). Seventy-six percent of the faculty had had a career conference in the past 2 years. Those who had had a career conference responded significantly more positively than those who had not had a conference to quality of work-life balance (mean: 3.10 and 2.68, respectively; $P = .001$) and to less pressure at work (mean: 2.82 and 2.52, respectively; $P = .035$) (S.J.E. and G. Parry, PhD, unpublished data). To obtain earlier data on career conferences, we reexamined CHB-specific data from the 2003 survey of HMS faculty (response rate: 48%); only 49% (154 of 315) of CHB faculty reported a career conference within the previous 1 to 2 years (M. Connelly, MD, MPH, personal communication, 2007).

The mentoring efforts based in the departments/divisions are reviewed annually in meetings between the OFD Director and Chief. The OFD receives numerous requests for the mentoring guidebooks from both departments and outside institutions. In follow-up to the pilot Matched Mentoring Program, the OFD solicited comments after 12 months. Only 4 pairs were clear-cut successes. Successful elements of mentoring were “a good fit”; productivity (papers, grants, promotion); regular meetings; informal interactions (eg, lunch); setting a time frame; mutual respect; and critical review of work. Challenges included the inability of mentors in different fields to assist with the science of the research project; time; lack of mentor training to deal with psychological issues; confusion between department/division chief’s expectations and those of the mentor; and mentoring occurring too late in the mentee’s career. As a result, several changes were made to enhance faculty development structures in departments, and the OFD has created a rolling program of mentoring assessments by the director to discuss with junior faculty a department/division solution (coaching faculty to talk to the chief or senior person) and to determine their “readiness” or need for other resources.

Skill-Building Seminars

Since the inception of the OFD, the number of workshops has increased from 14 in the first year to 38 in this past year, with 837 participants (300 unique individuals). Of the attendees, 48% were women and 52% were men, which is similar to the gender distribution for current CHB faculty (47% women, 53% men). For each program, the OFD defined learning objectives and, at the end of the session, collected evaluations and suggestions for improvement and future workshops. The mean score for overall teaching effectiveness was 3.7 of 4 (range: 3.3–4.0), with 4 indicating the highest score. The joint course on mentoring in 2006, which used a different scoring system for evaluation, also received high marks (1.6 of 5, with 1 being the highest score and 5 being the lowest score).

The evaluations for the HMS leadership program have been exceptionally strong; mean scores for lectures were 3.5 of 4.0, with 4 being the highest rating. From 2003 to 2006, 51 CHB faculty (51% women) completed the leadership course, with 3 having left for leadership positions in another medical school or industry. Data were obtained by using a brief 6-question e-mail survey in 2007 from 46 (96%) of 48 faculty still at CHB; 41 (89%) of 46 had taken on new leadership roles locally or nationally, 26% had been promoted, and another 20% had promotions in process. Comments were extraordinarily positive: “I have established clearer objectives,” “provided a new way of looking at academic medicine and administrative responsibilities,” “more efficient/directed meetings,” “helped me realize ways that I could change career direction,” “focus on bigger issues,” and “interviewed for Division Chief positions.”

Promotion

Each year, 82 to 100 faculty members have attended the promotion workshops. During 2006, 98 faculty members met with the consultant to review CVs and readiness for promotion; of these, only one third had attended a workshop that year. Two methodologies have been used to assess progress in promotions. First, we examined the total number of faculty promoted, and by gender and race, for the period of September 1, 1998, to August 31, 2001 (the 3 years before impact of the OFD), and compared it with the period of September 1, 2001, to August 31, 2004 (the 3 years post-OFD implementation). More men, women, URMs, and Asian faculty were promoted in the later period of time; the percentage increase in promotions was 17% for men, 56% for women, 60% for URM faculty, and 60% for Asian faculty. Second, we looked at the percentage of various ranks according to gender and race/ethnicity in 2001 and 2006, focusing on change among assistant and associate professors. There were statistically significant improvements for women and Asian faculty at these ranks (Figs 3 and 4). Although the absolute number of URM faculty increased slightly, there was no change in the percentage of URM faculty at any rank.

Work-Family Balance and Part-time Faculty

The Career and Family Networking Group and the many seminars on work-life balance have received excellent evaluations. The implementation of the paid postpartum policy has allowed a standardized approach to leave, which has benefited both faculty and chiefs. To learn more about faculty who work part-time (but have all their time devoted to CHB), the OFD in collaboration with a faculty member (M. McCann, MD, MPH) conducted a survey of departments in 2004–2005. Among women with full-time academic appointments, 15% (45 of 299) of instructors and 19% (15 of 79) of assistant professors worked part-time (0.5–0.9 FTE). All of the department chairs agreed that it was feasible to work part-time, and 77% had part-time faculty. Potential deterrents to hiring part-time faculty endorsed by departments included cost of malpractice insurance (23%), size of department (15%), and difficulty obtaining research funding (15%). No departments felt that difficulty assigning clinics was a deterrent. No inequities in benefits were reported.

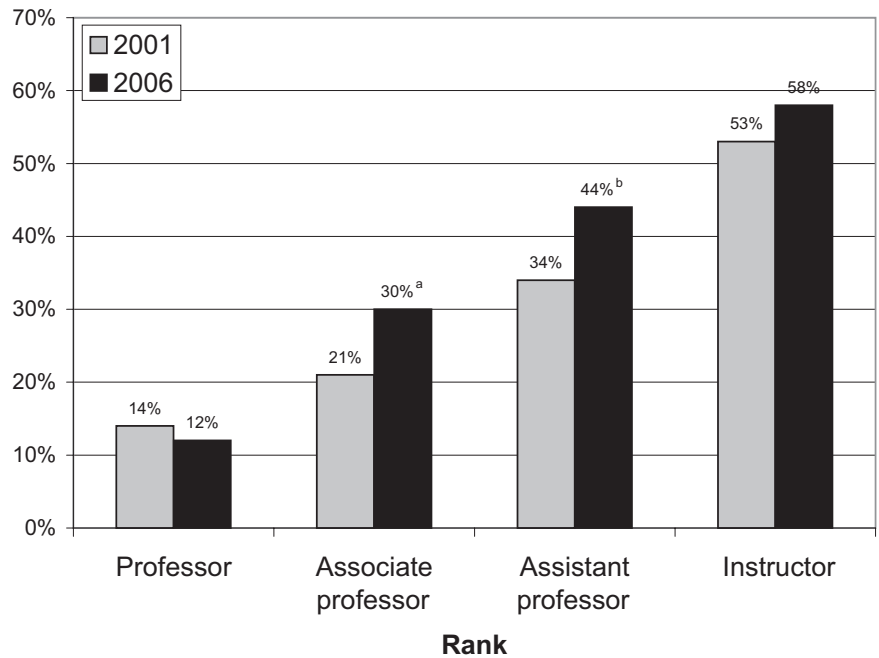
Diversity

To date, 5 URM faculty and fellows have been awarded fellowships to the Partnership Program. The 3 who have completed the program have taken on leadership roles; one participant commented: “I learned key skills/competencies that are critical for leaders irrespective of sector of employment such as conflict resolution, managing from the middle, team building, and discerning my own leadership style.” Promotion data have been mixed (see “Promotion” above and Figs 3 and 4).

Tools/Fellowships

CHB has provided a total of 29 faculty awards since 2002. The OFD collects annual outcome data on the

FIGURE 3
 Percentage of instructors and assistant, associate, and full professors who are women: CHB, 2001 and 2006. ^a $P = .023$; ^b $P = .005$.



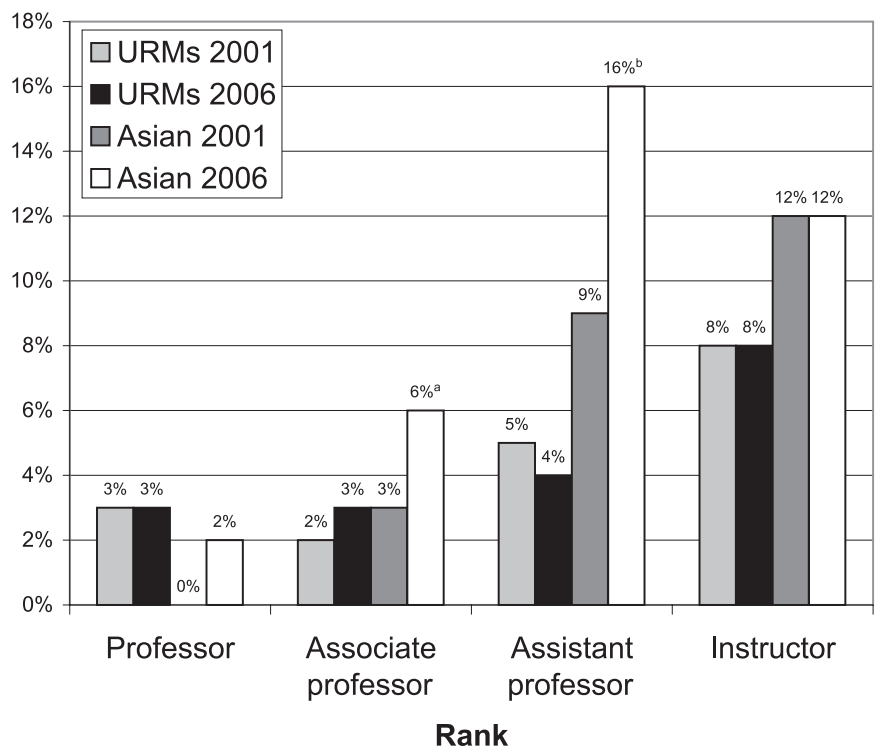
fellowship recipients. From 2002 to 2005, 8 faculty members received fellowships. The majority hired a technician or research assistant, which allowed them to spend time with their family. Recipients reported that the fellowships increased their contact with mentors across CHB and HMS. Three of the 8 recipients have been promoted (1 more is in process), 4 have received external funding, and 2 have left CHB for industry. Longer follow-up is needed to ascertain successful career

trajectories in academic medicine. In addition, 4 departments have established their own competitive fellowships for junior faculty.

DISCUSSION

A faculty development program was created at a pediatric institution 6 years ago in response to the need to recruit and retain the best faculty, the acknowledgment of the multiple demands faced by academic faculty, and

FIGURE 4
 Percentage of instructors and assistant, associate, and full professors who are URM or Asian: CHB, 2001 and 2006. ^a $P = .023$; ^b $P = .001$.



the lag in promotion and appointment to leadership positions of women despite the increasing number of women entering the pediatric workforce. The establishment of an OFD has led to a number of successes including increased promotion of women, high ratings of courses, equal attendance of men and women faculty at workshops, faculty engaging in career planning conferences with their chiefs, and accomplishments for those receiving career fellowships and participating in the leadership course. The success of the program can be attributed to a number of factors: active support from the CEO and COO, including participation in celebrations at the hospital and medical school; collaborations with the department and division chiefs in needs assessment and planning; an advisory committee that represents the spectrum of the community; active listening to the voice of faculty; built-in accountability and reporting; planned communication through print and internal and external Web-site resources; and a multidimensional framework. The OFD programs have been built on the Community of Mentors 3-tier framework as well as a developmental model of the faculty life cycle. Sensitivity to life-cycle transitions has been integral to the overall design of the offerings. Life's challenges can lead to disengagement instead of career satisfaction and professional vitality. A critical focus of this office has been on all faculty, but with special attention to women and minorities.

"Faculty development" is a term that has been used to encompass multiple efforts and initiatives in academic institutions.¹⁶⁻²⁷ In their survey of faculty affairs and faculty development, Morahan et al³⁰ included under the rubric of faculty development: mentoring programs, teaching skills, special programs for women and minorities, leadership development, orientation, career planning, research and administrative skills, ethics, and fellowships. Indeed, faculty development programs reviewed in the medical literature have ranged from intensive fellowships over 6 months to 2 years to short courses, to department-based or university-based initiatives, and to review of promotion criteria by a medical school office of faculty affairs. Faculty development fellowships or longitudinal programs are typically targeted to a small number of junior faculty, with a curriculum focused on academic skills and often mentored projects. Some programs have provided compensation to the departments for the protected time.^{19,20,24} Program evaluations have generally shown improved CVs, increased publications, and retention of academic faculty, and, in 1 case, retention of minority faculty in academics.²⁸ For example, the Executive Leadership in Academic Medicine program has been successful at reaching female faculty and providing collegial relationships across medical schools.³² In contrast to these longitudinal programs, faculty development short courses have focused on areas such as leadership²⁵ and teaching.^{16,21} The final model of faculty development that we chose was a comprehensive program with multiple components to reach all faculty through seminars, publications, individual appointments, and networking to provide mechanisms for reviewing individual faculty at the level of the division/department by the OFD, and to enhance institutional

vitality. To achieve some of the benefits of the class approach, we have encouraged our seminars to be interactive, providing faculty with the opportunity to meet both their peers and senior leaders. Those who desire more intensive clinical research training have undertaken 1- to 2-year programs. We are pleased that women and men have equally attended the seminars and appointments, and we estimate that >500 faculty members have directly interacted with the OFD this past year with many more reading publications, calling for advice, or consulting our Web site for information.

Mentoring has been a focus of many faculty development programs, including our own. Faculty frequently cite mentoring as critical to their success.^{10,29,30,33,34} In a survey of faculty in 24 medical schools, Palepu et al³³ found that those with mentors rated the adequacy of support from their institution for teaching, research, and administrative activities as higher than those without mentors and were more likely to have received a research grant. Faculty who were part of a mentoring program within a department of obstetrics and gynecology felt supported by the department and a "greater sense of camaraderie."²⁹ In a recent review of mentoring in academic medicine, Sambunjak et al³⁴ observed that, despite limitations of studies, mentoring seemed to have an influence on personal development, self-confidence, career choice, and research productivity. At CHB, we have worked with departments to encourage mentoring relationships starting with the letter at recruitment, fostered discussion of mentoring through panels, and created short booklets to help mentors and mentees understand their roles and responsibilities. The OFD centrally provides seminars and individual meetings but works in a partnership with the departments/divisions to provide mentoring relationships. The observations from the pilot Matched Mentoring Program have led to an augmented approach to reach more faculty by offering to assess their career plans and the resources they need and then to coach them in how to make best use of available resources.

Encouraging annual career conferences has been a critical aspect of faculty development in our program and others^{26,27} and is emphasized as part of the "May Is Faculty Development" month. Coaching junior faculty through workshops and individual meetings on how to prioritize their issues, address the criteria for promotion, and discuss with their chiefs career planning is an essential element. We were heartened to see that having had a career conference was associated with improved scores for quality of work-life balance and lessened workplace stress.

Demystifying promotion criteria is an important first step of faculty development programs.^{26,27} Many faculty are unaware of the criteria, the need to focus one's scholarship, the importance of good citizenship balanced with committee assignments early in one's career, and the need to present and network locally and nationally. Because female medical faculty remain less likely nationally than men to advance to associate professor or full professor,³⁵ it is critical that seminars, individual meetings to review CVs, and annual career conferences

make the requirements and the process for promotion transparent at the same time that barriers are addressed. In both the Johns Hopkins University School of Medicine intervention²⁷ and that at our own center, men and women benefited from clarity of promotion criteria. At CHB, more men, women, and minorities were promoted in the 3 years after the establishment of the OFD. We are pleased that over the past 6 years, women in particular have made significant strides in becoming assistant and associate professors, with increases in the percentage of women at those ranks of 10% and 9%, respectively. During the same time interval (2001–2006), HMS overall saw an increase of 5% in the percentage of female assistant and associate professors (18%–23% for associate professors and 29%–34% for assistant professors), and the Association of American Medical Colleges saw a 3% to 4% increase in the percentage of women at these ranks (24%–28% female associate professors and 36%–39% female assistant professors).³⁶ Although the larger changes for CHB likely reflect not only the efforts of the OFD but the number of women faculty in pediatrics and pediatric specialties, the data do indicate a promising trend for women pediatric faculty. Redoubled efforts are clearly needed for minority faculty.

Concrete resources for research, such as protected time and funding for research assistants, make an institutional statement about valuing junior faculty. In particular, we focused our first grant-making on faculty with family responsibilities and URM faculty. Review of faculty who received our seed grants and studies by Paller and Cerra³⁷ and Jagsi et al³⁸ have suggested positive outcomes in grant funding, publications, and retention. In addition, 4 departments have set up their own special fellowship grants for faculty to augment hospital programs.

Over the past 5 years, divisions and departments have expanded part-time opportunities, recognizing that academic commitments may be particularly challenging when women are balancing careers and family. Fifteen to 20% of our junior faculty women work part-time, and many others work a flexible schedule. Using a peer-mentoring model, the faculty who are part of our Career and Family Networking Group have supported each other and sponsored activities for families. Faculty in pediatrics nationally would benefit from more available child care and back up child care, changes in tenure rules and the “clock,” part-time K awards, family leave, support for research assistants, travel grants that include child care, housing loans, and loan repayment.^{5,9,10,39} Pediatrics, with a predominantly female workforce, will need to be in the forefront of creative change and is fortunate to have relatively low malpractice premiums, which can allow cost-effective options. Models for part-time clinician teachers can build on existing models in academic medical centers that currently accommodate physician researchers who have limited clinical schedules. However, high malpractice premiums are a disincentive for part-time practice in surgical specialties, and the minimum time commitment possible will depend on fixed expenses, salary expectations, patient care and departmental/academic center support and investment

during the critical childbearing years. Because faculty who work part-time or serve in a primarily clinical role may feel like second-class citizens in an academic setting, titles and recognition of the value of their contributions to the institution is an important consideration. One children’s hospital changed their policies to allow part-time faculty to be on the tenure track and dropped the “adjunct” title.⁴⁰ At HMS the longer-service criteria has allowed for promotion from instructor to assistant professor after 10 years of “meritorious service.”

Creating a more diverse faculty with equity in leadership positions and promotion is a challenge across medical schools and pediatric hospitals.^{11–14,41–43} A survey of medical school faculty found that URM faculty were significantly less satisfied with their careers and more often considered leaving academic medicine within 5 years than their white counterparts.¹⁴ To provide more input into meeting institutional goals, we have recruited a minority faculty member to our office to co-chair the Diversity and Cultural Competency Council. Other hospitals have created separate Offices of Minority Affairs or Health Care Disparities, and the American Academy of Pediatrics Committee on the Pediatric Workforce recently outlined a number of steps to increase diversity.⁴⁴

There are several limitations to the outcomes and evaluations presented in this article. The creation of an OFD was not a randomized trial, and the multifaceted initiatives cannot be easily teased apart to judge individual contributions to the whole program. Similar to the intervention to improve women’s careers at Johns Hopkins University School of Medicine in the early 1990s,²⁷ many components of the intervention overlap in their goals. The statistics on promotion were downloaded from the HMS database and may have included faculty who have left the institution in both time periods studied. Because changes in women promoted may have occurred, in part, as a result of heightened awareness nationally of the lagging promotion of women, the changes noted are unlikely to be solely attributable to the OFD. In addition, although the response rate for the physician survey in 2006 was acceptable for a voluntary survey, a higher rate would have been preferable. More or less satisfied physicians may have been more likely to respond to a 2006 survey; nevertheless, the extensive and candid answers to 3 open-ended questions indicated that the respondents represented a cross-section of physicians. The inclusion of PhD faculty researchers would have enhanced the value of the survey. The data on the leadership course participants was obtained more easily and, thus, was more representative of that group. Although workshops were rated highly by faculty, it is unknown to what extent faculty applied the learning to their lives. In addition, it is possible that a number of faculty were nonparticipants because of lack of knowledge, interest, or time. Despite these caveats, the initiation of an OFD seems to have benefited many, but not all, faculty over the past 6 years. The experiences and limitations outlined should allow faculty development programs established in other pediatric institutions to determine metrics prospectively, both process measures, such as evaluation of seminars and percentage of com-

pleted career conferences, and outcome measures, such as promotion and percentage of women and minorities at various ranks.

CONCLUSIONS

CHB created a new pediatric hospital-based OFD in 2001 to address many of the challenges faced by all faculty, but particularly female and minority faculty. We found that the most critical early elements of a new OFD were a needs assessment, support from and reporting directly to hospital leadership, a communication strategy, partnerships with chiefs (including reviewing materials, giving talks, etc), seminars and individual meetings to elucidate promotion criteria, annual career conferences, creation of an institutional framework, and tracking of metrics for the institution and with each department. Short-term outcomes of our program, including promotion, have been promising, and feedback from faculty has been enthusiastic. An internal leadership course has allowed faculty to participate without travel, and women have equally taken on new leadership roles. Even faculty who have not yet attended workshops have commented that reading *Perspectives* makes them feel "valued." Culture change for creating institutional and faculty vitality is a journey. We hope that the template of activities and materials outlined in this article and on our Web site will provide a menu of activities for pediatric departments and pediatric institutions to address the special issues that confront pediatricians and pediatric specialists over the next decade. Excellence of pediatric academic medical centers depends on recruiting and retaining a diverse faculty with talents in research, teaching, clinical care, administration, and community service; thus, we hope that pediatric institutions and departments will share best practices and new models of faculty development to enhance child health.

ACKNOWLEDGMENTS

We are grateful for the constant support of Jim Mandell, MD, CEO, Sandi Fenwick, MPH, COO, and the department and division chiefs at CHB; the faculty at CHB who have given us many ideas on how to improve faculty development efforts and responded to surveys; Maureen Connelly, MD, MPH, for data from the HMS survey; Gareth Parry, PhD, for the CHB ambulatory survey; Alka Indurkha, PhD, for statistical analysis; Alison Clapp, MLS, for library support; and Elizabeth R. Woods, MD, MPH, Lydia Shrier, MD, MPH, and Frederick Lovejoy, Jr, MD, for critical review of the manuscript.

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Sarah Jean Emans, Carole Teperow Goldberg, Maxine Ellen Milstein and Jill
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Pediatrics 2008;121:390-401

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