Fellowship Training Programs: Results of the Fellows' Survey

The fellows' survey shows differences among academic, hybrid, and private programs.

BY DARRELL E. BASKIN, MD; JEREMY D. WOLFE, MD; AND CHIRAG P. SHAH, MD, MPH

At the Fellows Forum in Chicago at the end of January 2010, we conducted a confidential and anonymous survey of second-year vitreoretinal fellows to evaluate their fellowship training experience and career plans. We collected 41 surveys from the approximately 69 fellows in attendance. The cumulative data provide an interesting snapshot of vitreoretinal surgery training in the United States between 2008 and 2010.

FELLOWSHIP SETTINGS

Fellowship programs fall on a spectrum from academic to hybrid to private practice designs. The distinctions between these categories are often blurred. Typically, academic programs are university-based, logistically and financially, with a greater emphasis on research (eg, Massachusetts Eye and Ear Infirmary). Private practice programs serve more as an apprenticeship, without a research focus (eg, Dr. Smith's fellowship). Hybrid programs have a private practice fiscal structure with a dedicated research mission (eg, Wills Eye Institute). Most fellows self-described their training program as academic (51%, n=21), followed by hybrid (37%, n=15) and private practice (12%, n=5). One-third of fellows in academic programs have protected research time, compared to just one in five fellows in either hybrid or private practice programs. Almost every fellow in academic and hybrid programs conducted research, compared with just over half of private practice fellows. Everyone conducting research completed clinical projects, either exclusively or in part with lab research. As expected, there was a clear gradation in lab research experience, with academic fellows conducting more bench work than hybrid or private fellows (38% vs 21% vs 0%, respectively).

NUMBER OF ATTENDINGS

Hybrid programs tended to have more attendings than either academic or private practice programs. There was a median of seven surgical attendings and two nonsurgical attendings in hybrid programs, compared with five surgical and two nonsurgical attendings in academic programs,

TABLE 1. OVERVIEW OF CURRENT SECOND-YEAR VITREORETINAL SURGERY FELLOWS GRADUATING IN 2010.

	Number	Happiness (1–10)	Compensation (mean USD)	Lab research %	Planning to do primary buckle (%)	Planning to do segmentals (%)
Academic	21	7.6	$47,600	38	95	40
Hybrid	15	8.4	$45,200	21	80	33
Private	5	5.0	$59,000	0	40	20

and three surgical and one nonsurgical attending in private practice programs. There may be some advantages to programs with more attendings, including more clinical and surgical volume, and more management opinions and styles. A smaller program, conversely, may allow more personalized mentorship to nurture one's growth while fostering a more nuanced dialogue in one's development as a vitreoretinal surgeon.

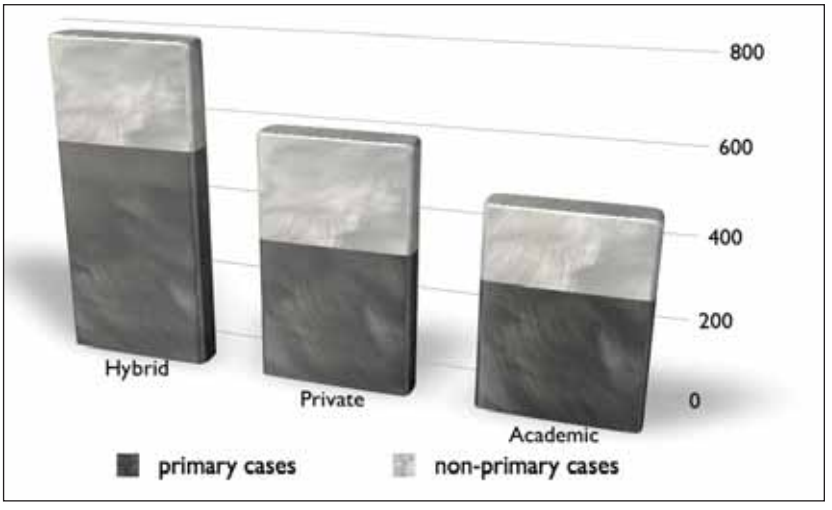

Figure 1. Surgical volume by program type. After two years of fellowship, fellows at hybrid programs will have participated in 792 surgeries, 539 of which will have been primary cases (68%). Private practice fellows will have participated in 600 surgeries, 348 of which will have been primary (58%). Academic fellows will have participated in 486 surgeries, 311 of which will have been primary (64%).

GRADING OF AREAS OF TRAINING

Fellows graded their learning experience in five aspects of vitreoretinal training. Surgical retina scored the highest, followed by medical retina, uveitis, oncology, and pediatrics. There were differences among program types. Fellows at hybrid programs graded their surgical retina training as a 9 out of 10, vs 8 for academic and private practices. This likely reflects the higher surgical volume at hybrid programs (Table 1). All program types had similar grades for medical retina, scoring 7.5 out of 10. Overall grades for uveitis, oncology, and pediatrics were considerably lower, averaging 5.5 out of 10. Uveitis training ranked highest among hybrid programs, followed sequentially by academic and then private practice. Oncology was graded lowest among private practice fellows, and pediatrics was graded lowest among hybrid fellows.

PATIENT VOLUME

With America's aging population, coupled with the efficacy of frequent anti-vascular endothelial growth factor agent injection, retinal specialists must see an increasing number of patients every day. Fellows reported feeling comfortable seeing a maximum of 40 patients per day; individual responses ranged widely from 25 to 65. There were differences, however, among the types of training programs. The median number of patients per day for hybrid fellows was 45, compared with 40 for academic fellows and 35 for private fellows. Less than half of all fellows, 44%, were responsible for running a fellows' clinic as part of their program; it comprised 10% to 50% of their training. Interestingly, individuals responsible for a fellows' clinic in training, on average, felt that they could see 45 patients per day compared with 42 patients among those without a fellows' clinic. We originally assumed this difference would be greater, given the potential confidence and efficiency fostered by an autonomous fellows' clinic. Differences in ancillary staffing between attendings' and fellows' clinics may account for the similarity in perceived expected patient volume.

HAPPINESS

Self-perception of happiness was perhaps the most important question of our survey. Fellows rated happiness on a scale from 0 (rather pass a kidney stone) to 10 (perpetual nirvana). Overall, fellows were happy, with an average score of 7.5 out of 10; however, the range was broad, from 2 to 10. Ratings varied by program type: hybrid programs scored 8.4, academic scored 7.6, and private scored 5.0.

COMPENSATION

As often in life, happiness and salary were inversely related (please do not repeat this to your future employer). In general, the level of reimbursement was opposite that for happiness; fellows in private settings made slightly more than those in academic positions, who in turn, made more than those in hybrid fellowships. The median annual salary for fellows was $50,000, with a range of $30,000 to $70,000.

SURGICAL VOLUME AND EXPERIENCE

At the time of the survey, fellows had participated in

an average of 433 surgical cases. Fellows at hybrid practices did the most surgery (549) when compared with private practice (400) and academic fellows (348). In two-thirds of these cases, fellows were the primary surgeons, performing at least 90% of the procedure. Overall, fellows performed an average of 273 cases as the primary surgeon. The range of primary surgeries varied widely, from 15 to 650 cases. Hybrid fellows performed an average of 363 cases as primary surgeon, followed by academic fellows (222) and private practice fellows (210). Interestingly, and perhaps shockingly, the percentage of primary cases varied tremendously, from 5% to 100%. It is unclear if the lower end of this range represents a decreased availability of appropriate teaching cases or reluctance of the attending to pass cases to fellows. The upper end of this range may reflect unstaffed surgical cases or a great deal of confidence in one's fellow. One fellow commented, "Attendings are present for about 80% of cases but rarely scrub. I like the autonomy about 20% of the time." In our opinion, neither extreme fosters good education.

Fellows projected that they will participate in an average of 615 surgeries by graduation, with a range of 160 to 1,700.

Fellows projected that they will participate in an average of 615 surgeries by graduation, with a range of 160 to 1,700. Fellows in hybrid programs predict 792 cases, compared with 600 cases among private practice fellows and 486 among academic fellows (Figure 1).

Four out of five fellows already felt comfortable peeling the internal limiting membrane (ILM). As expected, those comfortable peeling the ILM had performed more primary cases, an average of 301, whereas those not yet comfortable had performed only 171 primary cases. This analysis seems fairly intuitive, but there were some outliers. For example, one fellow who performed 35 cases as the primary surgeon reported comfort with ILM peeling; another fellow did not feel comfortable peeling ILM after 350 primary cases. These outliers may reflect differences in hubris and honesty among our respondents.

Thankfully, primary scleral buckles do not seem to be going the way of the dodo bird, at least among the current cohort of retina fellows. Most of the fellows (82.5%) reported that they will perform primary buckles whenever reasonable. Only one person reported that he or she will not perform primary buckles, and the remainder will try to avoid them if possible. Sponges and segments, however, are inching closer to extinction. Only 30% said that they would use sponges or segments when reasonable, 17.5% said they would use them only if unavoidable, and 47.5% would not use them at all.

FUTURE EMPLOYMENT

About two out of three second-year fellows had secured a job by the end of January 2010. The most common ways in which they had learned of their job included, in descending order of frequency, another fellow or colleague, an attending, a direct inquiry, an advertisement, and the American Academy of Ophthalmology meeting. Fellows preferentially secured private practice positions, followed by academic and then hybrid jobs. Although almost half are pursuing positions in private practices, two out of three fellows will train fellows, residents, and/or medical students in their future jobs. Furthermore, 80% plan to continue research.

SUMMARY

On the fellowship interview trail, we remember comparing notes on various programs, mentally ranking them from "best" to "worst." In hindsight, and with results from this survey, the differences within program types are less significant and perhaps less important than we assumed while formulating our rank list. The most significant differences are rooted in the philosophical tenets of a program, whether it be an academic, hybrid, or private practice. Program types strike slightly different balances among clinical, surgical, and academic experiences, as characterized in this survey. Choose a philosophy that best matches your own, both for training and for a career. The good news, regardless of program type, is that ILMs will continue to be peeled, detachments will continue to be buckled, research and training will continue to prosper, and a growing number of patients will continue to be treated. ■



Darrell E. Baskin, MD; Jeremy D. Wolfe, MD; and Chirag P. Shah, MD, MPH, are second-year vitreoretinal fellows at Wills Eye Institute in Philadelphia, PA, and members of the Retina Today *Editorial Board. Dr. Baskin may be reached at darrellbaskin@gmail.com; Dr. Wolfe may be reached at jeremydwolfe@gmail.com; and Dr. Shah may be reached at cshah@post.harvard.edu.*