

## The American Society of Clinical Oncology Cancer Foundation Grants Program: A 25-Year Report and a Look Toward the Future

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### A B S T R A C T

The American Society of Clinical Oncology (ASCO) Grants Program began in 1984 with a single \$16,000 grant to a young investigator for start-up research funding. In 2009, the Grants Program, now administered by The ASCO Cancer Foundation, awarded more than \$6.5 million to 70 different investigators. This article, celebrating the 25th anniversary of this initiative, describes the history and evolution of the Grants Program, attempts to measure the impact of the program on clinical cancer research through an analysis of the career paths of past recipients, and addresses challenges that the program will face as it enters its second 25 years.

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### INTRODUCTION

“If we are to encourage bright students to pursue patient-oriented research as a career, there must be a nurturing environment, as well as grant mechanisms sufficient to support their endeavors.”

—American Society of Clinical Oncology Public Issues Committee (1996)<sup>1</sup>

### HISTORY OF THE YOUNG INVESTIGATOR AWARD

Research and training have represented major cornerstones of the mission of the American Society of Clinical Oncology (ASCO) since its founding in 1964. As the organization matured, the importance of identifying and fostering the efforts of young investigators became clear to both the leadership and the membership. The creation of the ASCO Grants Program in 1983 represented one of the first such efforts of any medical subspecialty organization.

In 1983, Saul Rosenberg, MD, ASCO President, 1982 to 1983, announced that a new, 1-year grant of \$16,000 would be awarded in the following year to a single young investigator in oncology who was within a year of completing fellowship training. This award was to be designated, established, and administered solely by ASCO; was not to be renewable; and was intended to provide seed grant funds to a young investigator for research in oncology.<sup>2</sup> The initial award was funded by the Mead Johnson Pharmaceutical Division of what is now Bristol-Myers Squibb with the encouragement and support

of Thomas Jordan, Senior Director. Since 1983, the mission of the Young Investigator Award (YIA) has continued to focus on promoting high-quality research in oncology by providing funds to promising investigators during their transition from a fellowship program to a faculty appointment. YIA proposals may be clinical or translational research projects that are mentored by a faculty member. Preclinical in vitro or animal studies are considered acceptable as long as the outcome of these studies can ultimately lead to patient-oriented clinical research. The selection process for YIAs involves in-depth expert review by an appointed committee of leading researchers, known as the Grants Selection Committee (GSC). The current selection criteria take into account the strength of the hypothesis-driven proposal, the strength of the mentor's support of the proposed project and the applicant's career development, the potential of the applicant to pursue an academic clinical oncology career, and the availability of institutional resources to support the proposed project.

A four-member Scholarship Awards Committee, an early version of today's GSC, met in February 1984 and selected the first YIA grant recipient, Judith Salmon Kaur, MD, then of the University of Colorado, who received her grant at the ASCO Annual Meeting in May 1984. Kaur's research proposal was entitled, “The Role of Melanocyte Stimulating Hormone (MSH) and MSH Receptors in the Growth of Human Malignant Melanoma.” In 2004, 20 years after receiving her YIA, Kaur reflected, “It was a wonderful event that stimulated me to remain

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involved in academic endeavors and to become—and stay—involved in clinical trials.” Kaur has enjoyed a successful career in academic oncology, with her research interests now directed at the study of women’s cancers in Native American populations. Today, Kaur is the Medical Director for Native American programs of the Mayo Comprehensive Cancer Center, as well as the Medical Director for the Mayo Clinic Hospice, Chair of the Palliative Care Task Force at Mayo, and a past member of ASCO’s Task Force on Health Disparities.

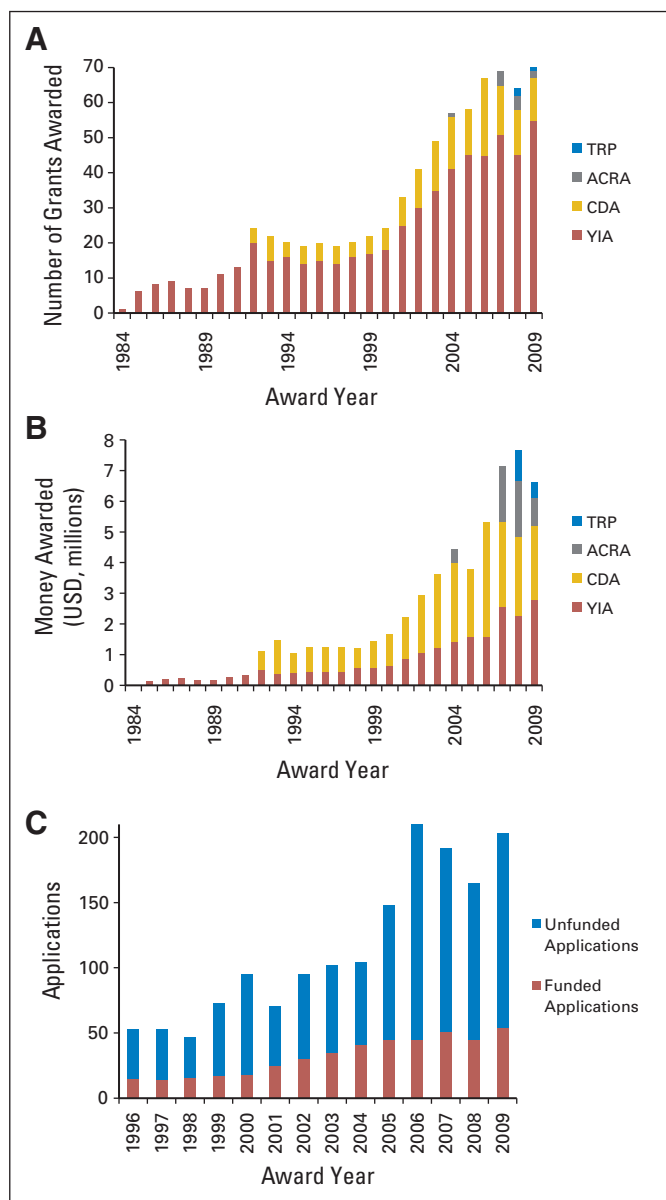
### GROWTH OF THE YIA

The ASCO Board of Directors expanded the number of fundable YIA grants in 1985 from one to six and increased the amount of each award to \$25,000. During the second year of the award, Oliver Press, MD, PhD, received a YIA to study an anti-CD20 monoclonal antibody therapy for B-cell lymphoma.<sup>3</sup> Other YIAs awarded at the 1985 Annual Meeting included the first award to a pediatric oncologist, Naomi Winick, MD, for the study of methotrexate-induced CNS toxicity, and a grant to George Shaw, MD, PhD, to study leukemia viruses. As word of the program’s existence spread, the number of companies that supported the YIA increased from one in 1984 to four in 1985 to eight in 1986. Importantly, in the late 1980s, the scope of the YIA was further expanded to include additional oncology specialties. The first YIAs to radiation oncologists were awarded to Roger Macklis, MD, and Theodore Lawrence, MD, PhD, in 1987 and 1988 for therapeutic studies using radioimmunoglobulins and halogenated deoxycytidines, respectively. Also in 1988, Edgar Staren, MD, PhD, became the first surgeon to receive a YIA with his proposal, “Lymphokine Activated Killer Cells From Tumor Infiltrates.”

The YIA program continued to grow (Figs 1A and B). By 1990, the number of submitted YIA grant applications had increased to more than 50, with 11 recipients being selected. The 1990s also brought additional diversification of the program. In 1990, the first international YIA recipient, Kirk Shultz, MD, from the British Columbia Children’s Hospital, was selected for his work on the role of B cells in the T-cell immune response.<sup>4</sup> This award paved the way for the development of the current worldwide grants program. For the 2009 YIA competition, applications were received from 14 different countries, including not only North American and European countries, but also Argentina, Australia, China, Iran, Jordan, and Singapore.

### EXPANDING THE PROGRAM: THE CAREER DEVELOPMENT AWARD

During the early 1990s, ASCO recognized both the successes and the limitations of the YIA program. The organization acknowledged that more mature investigators who had recently received their initial faculty appointment also merited support to develop clinical cancer research programs. This led to the creation of the mentored, 3-year Career Development Award (CDA; Table 1). The CDA was originally named the Clinical Research Career Development Award, and these grants still support only clinical research proposals, but the definition of clinical research established by ASCO is broad (“hypothesis-driven research that employs measurements in whole patients or normal human subjects, in conjunction with laboratory measurements as appropriate, on the subjects of clinical biology, natural history, pre-



**Fig 1.** (A) Number of the four grant types awarded each year from 1984 to 2009. (B) Amount of grant money awarded yearly, in U.S. dollars (USD), for each grant type from 1984 to 2009. (C) Number of applications received that were either funded or not funded from 1996 to 2009. TRP, Translational Research Professorship; ACRA, Advanced Clinical Research Award; CDA, Career Development Award; YIA, Young Investigator Award.

vention, screening, diagnosis, therapy, or epidemiology of neoplastic disease”<sup>1</sup>).

Under the leadership of ASCO President Martin Abeloff, MD, the first four CDAs were awarded in 1992. These awards included the first grant in cancer outcomes research, which was given to Jane Weeks, MD, MPH, on “Utilities as a Measure of Quality of Life in Cancer Patients.” With this award, ASCO further extended its scope of research funding, and the Grants Program now frequently supports investigators who are studying health outcomes, survivorship, and health services. During the mid-1990s, ASCO began to identify “double” award winners—those individuals who had successfully competed for a YIA and subsequently a CDA. These initial joint award recipients include such current oncology leaders as Carol Aghajanian,

**Table 1.** Comparison of Grants Awarded by The ASCO Cancer Foundation

Characteristic	Young Investigator Award	Career Development Award	Advanced Clinical Research Award	Translational Research Professorship
Year of inception	1984	1992	2004	2008
Total amount awarded	\$50,000	\$200,000	\$450,000	\$500,000
Award term, years	1	3	3	5
Stage of career (at the time of grant application)	Within the last 2 years of the final subspecialty training program	First to third year of faculty appointment	Fourth to ninth year of faculty appointment	Must have a full professor appointment and be an active mentor
Research type	Translational or clinical	Clinical	Clinical	Translational
Total grants (from inception through 2009)	578	167	11	3

NOTE. All current requests for proposals and complete listings of the grant recipients can be found at [www.ascofoundation.org](http://www.ascofoundation.org).

MD, Jose Baselga, MD, Heinz-Josef Lenz, MD, and Gail Tomlinson, MD, PhD. Baselga recently reflected on his receipt of the two grants, stating, “We all are in a very fragile situation because when we finish our fellowship and are about to become faculty as a clinical physician—at that time, you’re being pulled into clinical usage and you need protection for your research. Basically the work supported by the CDA provided a clear indication to me that my research was of importance. I would not have made it as a clinical researcher without the ASCO YIA and CDA. The project in the lab I was working on was the trastuzumab-paclitaxel combination... The break-through paper about this, which could not have been written without the early work supported by my YIA and CDA, has been cited close to a thousand times. So it changed my life, and [the Grants Program] also has changed the life of many other people. That’s why, when I became President of the European Society of Medical Oncology (ESMO), the first thing I did was to expand six-fold our fellowship program, because the ideal thing here is to support all promising young researchers and grant them this type of opportunity.”

The new field of targeted cancer therapies was ushered in by the approval by the U.S. Food and Drug Administration of rituximab in 1997 and trastuzumab in 1998. As the YIA application pool and grantees continued to grow (Fig 1C), more proposals were received focused on defining and describing specific pathways involved in cancer initiation and progression. In 1997, five of the 14 YIAs that ASCO awarded were given to researchers who would later become members of some of ASCO’s major committees. Jeffrey Dome, MD, Roy Herbst, MD, PhD, Robert Orlowski, MD, PhD, and Charles Rudin, MD, PhD used their YIA funding to study telomerase, angiogenesis, proteosomal degradation, and apoptotic pathways, respectively, whereas Lawrence Fong, MD, focused his effort on the expansion of immunotherapy as a form of biologic therapeutic.

At the start of the 21st century, new technology was changing the face of cancer research. Microarray profiling of human cancers showed that tumor types could be classified and outcomes predicted using genomic technology. At the same time, the Grants Program was flourishing, awarding 25 YIAs and eight CDAs in 2001 (Fig 1A), often funding these novel technologies through grants such as “Gene Expression Analysis in Neuroblastoma” to Jaume Mora, MD. The number of YIAs awarded more than doubled between 2000 and 2004. The Grants Program also went through some major changes during this period. In 2004, the management of the Grants Program relocated from within ASCO to The ASCO Foundation (now called The ASCO Cancer Foundation). The *ASCO Daily News* reported, “To more effectively administer the funds and to ensure the future viability of

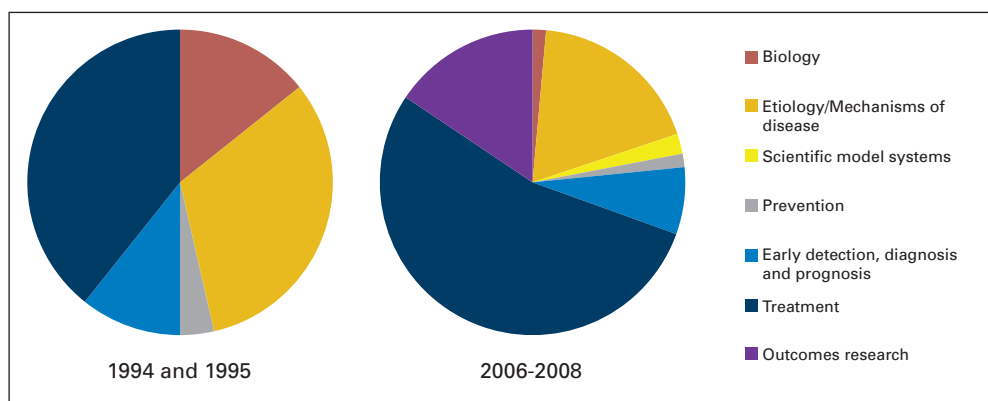
ASCO’s thriving sponsorship initiatives, in 2004 all of the grants were placed under the aegis of The ASCO Foundation, the charitable organization founded in 1999 to support the Society’s education and research mission worldwide.”

#### FURTHER DIVERSIFICATION OF THE GRANTS PORTFOLIO

In this same year, 2004, The ASCO Cancer Foundation introduced a third granting mechanism, a patient-focused 3-year grant called the Advanced Clinical Research Award (ACRA; Table 1), which is designed to provide funding to established investigators who are committed to clinical cancer research. In contrast to the YIA and CDA, the ACRA focuses on mid-career investigators who are focusing their efforts on clinical trials or translational research in a specific malignant disease area. The first ACRA was given to Vered Stearns, MD, in 2004 for a project in breast cancer that studied the safety, efficacy, and correlative biomarker changes when patients with primary breast tumors are treated with the histone deacetylase inhibitor, suberoylanilide hydroxamic acid.<sup>5,6</sup> Additional ACRA grants have focused on lung cancer, sarcoma, hematologic malignancies, and glioma, and an ACRA in colorectal cancer will be awarded in 2010.

The fourth and most recent ASCO award emerged from the recommendations of a Translational Research Task Force in 2005, chaired by Waun Ki Hong, MD, which had been convened to “recommend activities that would promote the training and career development of clinical oncologists for whom translational research is a major component of their professional activities.” The Task Force proposed the creation of a new 5-year professorship that would be given to well-established investigators who have made significant contributions in their field and are dedicated to mentoring the next generation of translational researchers (Table 1). In 2008, the first two Translational Research Professorships (TRPs) were awarded to Bruce Johnson, MD, and Everett Vokes, MD. Johnson is leading a team of researchers to personalize lung cancer therapeutics through genomic identification of resistance mechanisms to erlotinib and gefitinib. Vokes’ group is studying multiple novel agents that would sensitize head and neck and lung cancers to radiation or chemotherapy. A high level of interest has been evident for the TRP program; 52 letters of intent were submitted for the 2009 competition from many established leaders in the oncology community. A single TRP was awarded in 2009 to Merrill Egorin, MD, of the University of Pittsburgh Cancer Center for his research on poly(ADP-ribose) polymerase inhibitors as well as his dedication to fostering the careers of younger translational researchers.

## The ASCO Cancer Foundation Grants Program



**Fig 2.** Classification of research areas of the Young Investigator Awards awarded in 1994 to 1995 compared with 2006 to 2008.

### MORE THAN 25 YEARS OF RESEARCH FUNDED BY YIAs

Support for translational research is not unique to the TRP funding mechanism. The CDA and ACRA grants continue to specifically fund patient-oriented clinical research studies. However, as noted previously, the YIA is also open to preclinical projects that have translational potential. Interestingly, the focus of YIA research studies has shifted over time as the field of oncology has changed (Fig 2). During the mid-1990s, 46% of the research projects focused on the biology or causes underlying the development of cancer. In recent competitions, this percentage has decreased to less than 20%, whereas proposals studying cancer treatments now comprise more than half of all the funded projects. Notably, funding of health outcomes and survivorship research has increased significantly, with 15% of the YIAs presently being in these areas.

The 2008 YIA selection process funded an array of projects as disparate as cancer immunotherapy using genetically engineered T cells, the evaluation of gynecologic care for underserved populations, and the use of zebrafish as a model system to screen for new oncogenes. Because of the incredible diversity of research topics, the large number of applications, and the continued high level of commitment to the program, The ASCO Cancer Foundation has greatly expanded the GSC. The original committee of four individuals in 1984 has grown to a core committee of 48 members for the 2009 to 2010 YIA and CDA competitions, as well as additional subcommittees for the ACRA and TRP grants. The GSC is comprised of some of the foremost investigators from the United States and abroad, who represent a variety of research interests, oncology specialties, and clinical areas of expertise. This diversification allows The ASCO Cancer Foundation to support research careers for oncologists interested in all areas of cancer prevention and care. Now after 25 years, the YIA program continues to be a highly popular grant competition. In the 2008 to 2009 grant cycle, The ASCO Cancer Foundation received 203 proposals, of which it funded 54, the most in the history of the program (Figs 1A and 1C).

### SUCCESS AND IMPACT OF PAST GRANT RECIPIENTS

One of the measures of success for the Grants Program is examining the careers of past grant recipients and learning how their career paths have evolved. A survey of past grant recipients was conducted in 2007; responses were received from 238 (50%) of 474 grantees. Of these 238

responders, 94% of recipients reported that their YIA or CDA grant had advanced their career, and 87% reported that their funded project had led to further research. Admittedly, these data may be biased somewhat because of the 50% response rate, with the likelihood of responders to the survey being greater in recipients who had developed successful investigative careers. To assess the program's success in a more objective manner, all YIA or CDA recipients from 1984 to 2007 were identified through searches of the public PubMed and CRISP databases to determine how many alumni of the program are publishing journal articles and have received National Institutes of Health (NIH) funding (Table 2). This technique underestimates the total percentage of awardees with research funding because this method does not capture international grants or financial support received from private foundations. In fact, past YIA and CDA recipients have self-reported funding from a diverse array of sources. Despite the potential discrepancies between NIH funding and total funding, half of the YIA recipients from the 1980s and 1990s currently hold NIH funding, and 70% are publishing at least one peer-reviewed journal article per year (Table 2). The survey data also suggest that although many YIA recipients were still in fellowship programs at the time of their grant submission, most pursued careers in academic oncology. Supporting this impression, of the 428 (83%) past YIA recipients who are presently active ASCO members, 80% list academic medical center/university or a government agency as their primary professional location. Notably, many of the past YIA recipients who

**Table 2.** Publishing Rates and NIH Funding Percentages of Past YIA and CDA Recipients

Year of Award	YIA		CDA	
	% of Recipients Publishing	% With NIH Funding	% of Recipients Publishing	% With NIH Funding
1980s (n = 38 YIAs)	71	50	NA	NA
1990s (n = 151 YIAs, 39 CDAs)	68	49	87	79
2000s (n = 290 YIA, 103 CDAs)	77	28	91	44

NOTE. Recipients from 1984 to 2007 were counted as publishing if they had at least one article per year listed on the PubMed database for the past 5 years (or since the award, for recent recipients). Recipients were counted as having NIH funding if they were a principal investigator on a grant in the CRISP database.

Abbreviations: NIH, National Institutes of Health; YIA, Young Investigator Award; CDA, Career Development Award; NA, not applicable.

are not currently academic oncologists are still involved in oncology research. Past winners such as Barbara Weber, MD, Jakob DuPont, MD, Lance Leopold, MD, and Jonathan Lewis, MD, PhD, are now leaders in the pharmaceutical or biotechnology industry. Grants alumni are also active in medical research through other mechanisms; one example is Susan Kelley, MD, who is now the Chief Medical Officer of the Multiple Myeloma Research Foundation. When 6 years of past YIA recipients were randomly chosen (every third year between 1985 to 2000) and the recipients' current position was determined, 73% of the past recipients are currently working in academic medical centers, and 81% are still involved in medical research.

As expected, an even higher percentage of CDA recipients have remained in academic oncology because such awardees were required to already have an academic faculty position at the time of their award. Analyzing the CDA recipients from the 1990s through available public databases, 87% are still actively publishing and 79% have NIH funding (Table 2). A total of 91% of all past CDA recipients are still active ASCO members, and of those, 86% report that their primary professional location is an academic medical center/university.

In addition to publications and funding, many past YIA and CDA alumni have achieved leadership positions within ASCO and in other cancer-focused research organizations such as the American Association for Cancer Research, American Society of Hematology, American Society for Therapeutic Radiology and Oncology, ESMO, and the European Organization for Research and Treatment of Cancer. Laura Dawson, MD, a 2002 CDA recipient, commented, "receiving a CDA gave me the opportunity to highlight my research and meet other colleagues in the field during ASCO poster sessions and events as well as to interact with ASCO leadership and other grants alumni, which subsequently led to other opportunities." Within ASCO, at least 84 past YIA recipients and 52 past CDA recipients have served on a Society committee. This includes five past recipients who have served as elected members of ASCO's Board of Directors: Jose Baselga, MD, Nancy Davidson, MD, Theodore Lawrence, MD, PhD, Deborah Schrag, MD, MPH, and Barbara Weber, MD. Davidson was also elected as president of ASCO, serving between 2007 and 2008. Three grants alumni have been named as the chair-elect for 2010 for the ASCO committee on which they serve: Ethan Basch, MD, of the Health Services Committee, Theodore Lawrence, MD, PhD, of the Nominating Committee, and Ann Partridge, MD, MPH, of the Life-Long Learning Subcommittee. Moreover, a former CDA and current ACRA recipient, Dawn Hershman, MD, was selected to be one of the 10 members of ASCO's inaugural cohort for its Leadership Development Program. Outside of ASCO, Grants Program Alumni also report leadership activities in national clinical trial cooperative groups, often serving as disease committee chairs and as group protocol principal investigators.

### TRAINING MULTIPLE GENERATIONS OF ONCOLOGY LEADERS

Mentoring has always played a critical role in the Grants Program. All YIA and CDA applicants are required to have designated mentors, with the availability of such mentorship being an important part of the selection criteria. The GSC members foster the career development of the applicants by speaking at grants writing workshops that are offered at the ASCO Annual Meeting and, for the first time in 2009, providing written feedback on individual grants submitted by the YIA and CDA applicants to guide them in improving their research and grant-writing skills. As Arti Hurria, MD, a 2002 YIA and 2005 CDA recipi-

ent, pointed out, "The greatest benefit of the YIA and CDA is the relationships I have developed with my mentors and within the greater ASCO community." In addition to the YIA and CDA programs, the newly created TRP is designed to reward physician-scientists for their active participation in mentoring. The Grants Program has been built around training future generations of oncologists.

Another important activity of The ASCO Cancer Foundation's grants alumni is the active role they play in training and mentoring young oncologists. Ten alumni of the Grants Program, William Carson, III, MD, Ezra Cohen, MD, FRCPC, Lucy Godley, MD, PhD, Dawn Hershman, MD, Elizabeth Jaffee, MD, Pasi Janne, MD, PhD, Robert Orlowski, MD, PhD, Vered Stearns, MD, Melanie Thomas, MD, and Wells Messersmith, MD, are serving on the 2009 to 2010 GSC, and two additional past recipients are serving on ACRA review subcommittees, Laura Dawson, MD, and Heinz-Josef Lenz, MD. Moreover, Vered Stearns, MD, the first ACRA recipient, will chair this year's ACRA in Breast Cancer subcommittee. Many more grants alumni have participated in past years. In addition, the program has successfully fostered generations of oncology researchers because past recipients often serve as YIA or CDA mentors. Former grant recipients John Heymach, MD, PhD, Elizabeth Jaffee, MD, Jeffrey Meyerhardt, MD, MPH, Mark Moasser, MD, Hidayatollah Munshi, MD, Oliver Press, MD, PhD, and Vered Stearns, MD, all mentored a 2008 YIA recipient. An eighth 2008 YIA recipient was mentored by the 2008 TRP awardee, Bruce Johnson, MD.

### DISCUSSION

By any standard of measurement, the ASCO/ASCO Cancer Foundation Grants Program, initiated in 1983, has been an unqualified success. As of 2009, more than \$56 million have been distributed to more than 750 recipients. The core mission of the program at its inception was to fill an academic need by providing funding and, secondarily, mentoring to young investigators with a goal of nurturing them to develop productive careers as academic oncologists. This goal has clearly been reached. Many past awardees have successfully competed for peer-reviewed federal funding, and at least 75% continue to publish peer-reviewed manuscripts on a regular basis.

The ASCO Cancer Foundation Grants Program has evolved dramatically from 1984 when a single award to one young investigator was made. Such evolution has paralleled the development of oncology in general and ASCO in particular. A major reason for the popularity of the program, as evidenced by the increasing number of annual applications, has been the desire by ASCO to make these awards have a broad appeal. Beginning as a program focused on young medical oncologists, funding is now regularly bestowed on gynecologic, pediatric, radiation, and surgical as well as medical oncologists whose research efforts range from fundamental genomics to health services research to clinical trials to better understanding signal transduction. Particularly for the YIA, grantees now originate from not only the United States but from other countries, reflecting the international membership of ASCO.

Another strength of The ASCO Cancer Foundation Grants Program has been its acknowledgment of the need for funding at different levels in academic careers. Beginning in 1984 with the YIA, which was directed at senior fellows, 3-year Career Development Awards were added in 1992 to support junior faculty members for clinically related research, 3-year Advanced Clinical Research Awards were introduced in 2004 for midlevel

faculty who were conducting clinically related investigations in a specific disease area, and 5-year Translational Research Professorships were added in 2008 to support full professors with acknowledged international reputations and a demonstrated commitment to mentoring younger investigators. As of 2009, 52 individuals have received more than one of these different levels of grant support. Many prior awardees now hold senior academic, industrial, governmental, and foundation positions; the Grants Program has not just produced investigators—it has produced acknowledged leaders in oncology.

### LOOKING TOWARD THE NEXT 25 YEARS

As The ASCO Cancer Foundation Grants Program looks toward its second 25 years of existence, several challenges need to be addressed. The inception of the YIA program in 1984 was the result of a partnership between ASCO and a forward-looking pharmaceutical company. Approximately 80% of the \$56 million that have subsequently been bestowed on grant awardees has come from the pharmaceutical and biotechnology industry. Although the selection process used by the Grants Selection Committee has never been influenced by the source of the monies, direct alignments were initially made between a specific sponsor and an individual investigator, based on the scientific focus of the proposal and the product orientation of a sponsor. More recently, the unrestricted grants from industrial sponsors have no longer been aligned with any given recipient but have been placed in a general “pool” to be distributed as recommended by the Grants Selection Committee. Nonetheless, with the goal of minimizing even the appearance of any conflict of interest, The ASCO Cancer Foundation Board has set as a goal a 50% maximum for pharmaceutical support for the Grants Program, meaning that alternative sources of funding will need to be identified. During the last few years, disease-oriented foundations including Association of Specialty Professors, Avon Foundation, The Breast Cancer Research Foundation, Don Shula Foundation, Kidney Cancer Association, John A. Hartford Foundation, Lance Armstrong Foundation, Multiple Myeloma Research Foundation, Pancreatic Cancer Action Network, Prevent Cancer Foundation, Prostate Cancer Foundation, Sarcoma Foundation of America, Susan G. Komen for the Cure, and WWWW Foundation (Quad W) have provided support for investigators working in their specific areas of interest. More foundation support of this sort, provided in as unrestricted a manner as possible, will be required in the future if the Grants Program is to continue to prosper. In addition, ASCO members themselves need to support the program. It is noteworthy that the ASCO and ASCO Cancer Foundation Boards as well as the ASCO Clinical Practice Committee have each, for the last few years, sponsored a membership-derived YIA. It will be important to expand member contributions if the goal of decreasing corporate sponsorship to less than 50% is to be attained.

In the near future, The ASCO Cancer Foundation will need to address how best to balance its various grant products. On an annual

basis, what proportion of monies should be directed to YIA, CDA, ACRA, and TRP funding options? Is it realistic to expect that 1 year of funding for a YIA is sufficient to help make an investigator competitive for either a more advanced ASCO grant or a federally funded grant such as one in the “K” program? Should some or all of the YIA grants be extended for 2 years, possibly thereby reducing the total number of individuals funded? Not surprisingly, a review of the last several years of YIA and CDA recipients has shown a large proportional representation from several major comprehensive cancer centers, creating a geographic imbalance among awardees; should future grant competitions address this imbalance or continue to select those individuals with the most competitive applications? At present, funding for international applicants has primarily focused on the YIA level of grants; acknowledging that many regional oncology societies outside of the United States have initiated their own grants programs, is the present practice optimal? Should CDA, ACRA, and TRP grants be given in an equal manner to individuals based outside of the United States?

None of these challenges would be relevant if The ASCO Cancer Foundation Grants Program had not flourished in the manner that it has. The foresight of the ASCO leadership a quarter century ago cannot be overemphasized. Neither can the pride that ASCO and the Foundation hold for this innovative initiative be overstated. The Grants Program filled and continues to fill a critical need in the academic life of the oncology community, and the accomplishments of its alumni underscore the success of its mission. ASCO and the Foundation have demonstrated flexibility during the past 25 years in providing diversity by creating four levels of grants, encouraging participation from various oncologic subspecialties, and broadening the type of research it has funded. This pattern of flexibility will need to be maintained as the Grants Program further matures into its next quarter century. Accomplishing this goal will require the continued professional and fiscal contributions of the entire oncology community.

### AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

The author(s) indicated no potential conflicts of interest.

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