Military Orthopedic Residency: The Good, the Challenging, and the Different

Chad A. Krueger, MD and Daniel J. Stinner, MD

Being part of a team means being part of something bigger than yourself—it is one of the most basic life-lessons. If your work is gratifying, you put forth a bit more effort than you would otherwise, and develop a sense of pride in both your team and your teammates. All of this applies to the military. We are a team and we share a common goal: providing the best possible care to our service members and their families. Our job as orthopedic residents within the military is to make sure we are well trained to succeed in this aim.

There are many differences between Army and civilian residency programs. One of the most drastic differences is the fellowship. While nearly 90% of graduating residents go on to a fellowship in the civilian sector, only approximately one-third of graduating Army residents do so. One reason is the limited number of fellowship positions available for graduating Army residents each year. The available positions change yearly and are based on military needs at that particular time. For example, if you are a 4th year resident interested in total joint arthroplasty, but there are no openings at major military medical centers (MEDCENs) for a fellowship trained total joint surgeon, there will likely not be a fellowship position available that year. Even if there are fellowship spots available, an Army resident has to go through a rigorous application process in order to secure a fellowship position. The first step is to complete an Army fellowship application, which consists of similar components as a civilian fellowship application including letters of recommendations and a CV. The application is typically completed by mid October in the 4th year of residency and the selection is announced in mid December. The next step is applying for fellowship match. In the meantime, many of us have already started the civilian fellowship application process before we even know whether we were accepted for the Army fellowship.

Dr. Krueger and Dr. Stinner are Orthopaedic Surgery Residents, San Antonio Military Medical Center, San Antonio, Texas.

Address correspondence to: Chad A. Krueger, MD, Department of Orthopaedic Surgery, 3851 Roger Brooke Drive, Fort Sam Houston, TX 78234 (tel, 210-216-8538; e-mail, chad.krueger@amedd.army.mil).

Am J Orthop. 2012;41(3):E51-E52.

The decision to complete an Army fellowship also means that, in most cases, you incur an additional 2 years of service obligation. While this may not affect the ability of applicants to get or complete a fellowship, a graduating resident whose service obligation is only 4 years, may not want the extra commitment. They may decide instead to complete a civilian fellowship after gaining invaluable experience as a generalist in the Army. For the graduating resident whose service obligation is only 4 years, they may decide to serve their time and complete a fellowship after gaining invaluable experience as a generalist within the Army.

Regardless of whether an Army resident completes a fellowship, most will be deployed to a combat environment within the first 2 years after graduation. Even if you are a sports medicine fellowship trained surgeon, you are considered an Army orthopedic surgeon first and will be deployed as such. Many military orthopedic surgeons have said that their deployments are some of the best experiences of their lives, both professionally and personally. While we have not had the opportunity to deploy—because as residents we have a non-deployable status—we look forward to having a similar opportunity to care for our wounded service members overseas.

Graduating Army residents have multiple opportunities for placement. Whereas most Army medical facilities act like smaller community hospitals and are typically staffed by generalists and a hand or sports medicine orthopedist if needed, most of the MEDCENs function as large, civilian academic centers and are staffed by fellowship trained specialists. Some of these facilities are quite remote (eg, Landstuhl, Germany), while others are in large metropolitan areas (eg, Washington, DC). During our final year of residency or fellowship, we submit a rank list based on the openings at these different centers worldwide. Then, in February or March, we find out where we will be heading after graduation. This process is very similar to any match process in medicine. Depending

on your training, career goals, and type of practice you desire, the Army will try to align your personal goals with its needs. Therefore, everyone can be in the optimal position for success. For those physicians who only owe 4 or 5 years of military service, the locations they serve after graduation will likely be their last in the Army.

Being an orthopedic resident in the Army also provides us with the opportunity to be part of many multi-center research projects. Some of these are strictly within the military (eg, the Society of Military Orthopaedic Surgeons [SOMOS] and Research Collaborative "Innovative Methods to Preserve Articular Cartilage after Trauma"), whereas others are in collaboration with multiple civilian programs (eg, the Major Extremity Trauma Research Consortium and Fluid Lavage of Open Wounds). SOMOS is also beginning to put together lessons the military has learned from our research and experiences while deployed into a formalized package. This past December marked the first of what should be many Disaster Response Courses. This course, hosted in part by SOMOS, with collaboration from the Orthopaedic Trauma Association (OTA) and the American Academy of Orthopaedic Surgeons (AAOS), and gave military and civilian orthopedic surgeons alike, the ability to learn some of the lessons the military has learned during its most recent conflicts, and the recent disasters experienced by the civilian world by natural disasters and terrorist acts.

Military orthopedics has also worked hard over recent years to increase its collaboration with different orthopedic associations, such as the AAOS (ie, Extremity War Injuries Symposiums), Arthroscopy Association of North America (shoulder and knee arthroscopy courses), and the OTA (Disaster Response Course) to name a few. These associations have yielded some extremely positive results for military residents in the form of discounted rates, specialized courses, and other unique opportunities for all military residents. For all of these organizations, and the personnel who have worked so hard to make these opportunities a reality, we owe a very special thank you.

In addition to the previously mentioned research initiatives, all of the MEDCENs where residents train—there are 6 total for the Army—provide residents with many research opportunities. Most of these projects are centered on the wounds and injuries that we are commonly exposed to as a result of the current conflicts. Very high-energy blast and penetrating trauma wounds from explosive devices sustained during combat are commonly seen. Due to these injuries, military residents are frequently exposed to the principles of damage control orthopedics, deformity correction, limb salvage, amputation, wound coverage, and infection prevention/management, among others. However, residents are also exposed to many athletic injuries in addition to the variety of orthopedic conditions sustained by the retirees (eg, degenerative arthritis) and dependents (eg, scoliosis) of the military. This all equates to, in our opinion, a well-rounded education that is comparable to civilian orthopedic programs.

The treatment of wounded warriors also includes a rather unique view of state-of-the-art rehabilitation practices. Our Center For the Intrepid in Fort Sam Houston, Texas, provides a centralized location for rehabilitating soldiers and provides residents with a glimpse of what happens to these soldiers when their orthopedic treatment is 'finished.' Similar centers are also located in Bethesda, Maryland, and San Diego, California. Many new and, literally, life changing advances in rehabilitation (such as the Intrepid Dynamic Exoskeletal Orthosis brace) are being developed at this facility and being able to observe these rehabilitative efforts helps provide a more global picture of the patient's treatment.

Many opportunities that arise from being a resident within Army orthopedics are not anticipated when making the initial commitment to the program. This is especially true with professional and networking opportunities. The Army, and the military as a whole, is a very small and close-knit group. While staff turnover is quite frequent at many of the Army Treatment Facilities, it provides residents with an opportunity to interact with many orthopedic surgeons who go on to established practices and positions all over the world. The breadth of such a network can obviously assist a resident or staff member as they explore future career opportunities. The experiences gained from Army residency also provide residents with the ability to shape their career in the way they see most fit. Some residents will stay within the military for life, some will go on to academic facilities, others to private practice, and a few will dabble in all of the above. Many resident opportunities are truly dependent on the individual's aspirations or career goals. Some residents will take time off to complete a research fellowship, others to complete specific training to improve their leadership, and a few may opt to set-up their careers so that when residency is complete they can participate in more operational specific training (eg, Airborne school or being the commander of a Forward Surgical Team).

Of course, any program has its challenges, and Army orthopedics is no different. One weakness is that residents are not exposed to many of the economic barriers and constraints that guide most practices within the civilian world. While being shielded from such constraints can often feel like a blessing in the moment, many military residents and attendings do end up practicing outside of the military at some point in their career. Our system is setup so that there are no financial rewards for increased productivity and no financial penalties for lack thereof. As such, the little emphasis placed on maximizing patient encounters, figuring out how to increase our Relative Value Units, manage clinic throughput, or many other business lessons that are necessary in order to practice medicine in the civilian world. Not being exposed to some of the guiding principles of civilian practice can make this transition difficult. If you look at many of the young practitioner forums at the AAOS annual meeting, you are likely to see our bosses, mixed amongst senior residents and junior attendings learning about business models, coding, and reimbursements, as they prepare for their time as a civilian practitioner.

These are just a few of the many different and unique facets of completing a military residency. Like any other institution or residency program, the military is not perfect. However, it is an honor to treat and interact with our Wounded Warriors and we look forward to continuing to provide the best care possible for our soldiers.