Medicine, like art and architecture, relies on a number of building blocks to succeed. Setting specific instructions, maintaining structure and building collaborative teams yield a successful project. Much of the personal and professional work of Professor of Medicine Al B. Benson III, MD, FACP, associate director for clinical investigations at the Robert H. Lurie Comprehensive Cancer Center of Northwestern University, has been affected by these tenets. Whether traveling with family, appreciating art, photography and architecture or working with experimental therapeutics and developing national cancer treatment guidelines, Benson, who also oversees the gastrointestinal (GI) cancer program at the Cancer Center and at Northwestern Memorial Hospital, strives to help people get the most out of life.

His work includes treatments for esophageal, gastric, hepatobiliary tract, pancreas, colorectal and neuroendocrine cancers. These efforts include his contributions to Northwestern’s extensive, multi-modality liver-directed therapy program. He successfully lobbied state government for legislation to support patient access to clinical trials and to guarantee reimbursement for the multitude of cancer agents that are considered effective, but are “off-label.” In his work as associate director for clinical investigations, he oversees a group that builds interdisciplinary exchange and collaborative efforts among clinicians and researchers. He credits his collaboration with others as leading to the renewal of a six-year,
$2.9 million National Cancer Institute-supported Eastern Cooperative Oncology Group (ECOG) Grant, of which he is the primary investigator.

As part of the ECOG grant, he oversees an extensive network of centers, including those in Israel, Florida, Minnesota and Chicago. The grant includes clinical trials throughout the Cancer Center’s hospital network and funds research in a number of cancer-related areas. ECOG is a national network of cancer researchers, physicians and health care professionals at public and private institutions funded primarily by the National Cancer Institute. Northwestern has been a member of ECOG since 1973.

“One advantage at Northwestern is that you have considerable expertise across disciplines, which is absolutely critical for GI patients,” Benson says. “Northwestern has superb radiologists, pathologists, gastroenterologists, radiation, surgical and medical oncologists and outstanding dedicated GI nurse clinicians and nurse practitioners. And because of that strength, we can address a number of therapeutic issues in a research setting, including radiation issues, liver-directed therapies and lab science.”

His collaborative work and therapy research have allowed him to see the bigger picture of treatment – setting up guidelines so that the best possible care is in place across the country. It is the type of bigger-picture view that allows him to appreciate and take part in architecture, travel and photography when away from his research and away from his patients.

“So much of medicine is not clear cut,” Benson says. “Medicine as a science is certainly part evidence and scientific thought, but there’s also what’s referred to as ‘the art of medicine,’ where you have to be able to creatively synthesize information and come up with a working plan that has to be individualized for a certain patient. If you look at art, architecture and photography, a lot of it is problem solving.”

This love of problem-solving – Benson is “constantly redesigning” the 90-year-old house his family lives in – yielded his two main areas of interest in medicine – creation of treatment guidelines and developing prognostic and predictive laboratory markers that he hopes will move researchers closer to the goal of developing individualized patient therapy and translational clinical trials.

“In terms of my area of interest, if you look at GI, the goal is to make an effort to standardize cancer care across the country,” Benson says. “Treatment recommendations have been translated into lay language so patients and families can get enormous amounts of information that are understandable.”

This includes his work with the National Comprehensive Cancer Network, American Cancer Society and patient advocacy groups in developing treatment guidelines for patients in colon and rectal cancer. This information is important not only because GI oncology represents about 20 percent of all cancers, but because of the impact new drugs have had on survival, especially in colon cancer, the most common of the GI cancers.

“[GI cancers] can be highly lethal and each type has a different biological structure,” Benson says. “Patients can be extremely complicated in terms of medical problems and need extensive coordination. The ultimate goal is to be able to truly individualize cancer treatment based on tumor biology. We’re making steps, but we’re certainly a long way away.”

In both research and guideline development, Benson says collaboration is the key to success. This belief in collaboration drives his participation in such associations as ECOG’s Gastrointestinal Committee, where he is chair of the Data Monitoring Committee, and the United States Gastrointestinal Intergroup’s Executive Committee, which develop multidisciplinary trials in GI oncology. He is also the immediate past president of the Illinois Medical Oncology Society and a trustee of the Association of Community Cancer Centers.

But gastrointestinal oncology was not Benson’s primary focus upon his arrival at Northwestern 20 years ago. After earning a bachelor’s degree in psychology and an MD at SUNY-Buffalo, he served his residency in internal medicine and a fellowship at the University of Wisconsin-Madison.

“I was filling a need in GI oncology at Northwestern,” Benson says. “In academic medicine, you often have to try to fill a void at an institution. And the work I did as a fellow
was highly experimental, which, at the time, was important for patients with GI cancers since so few treatment options existed.”

His fellowship work resulted in a Phase I clinical trial in hepatic artery clinical therapy. The therapy’s connection to gastrointestinal oncology and his other work in experimental therapeutics helped Benson parlay that success into a successful career in working across the spectrum of gastrointestinal oncology.

“Experimental therapeutics was the perfect combination to develop in GI where there was an urgent need for novel approaches,” Benson says. “My focus currently is in developing new systemic therapies for patients with gastrointestinal cancers.”

In Benson’s view, patients benefit as much from treatment as from the development of prevention strategies and clinical trials. Benson oversees one of the largest Stage II colon cancer trials. The 3000-patient trial is the first large, randomized, prospective trial to use patient tumor molecular biology to define the treatment approach.

“We want to see if patients can be cured with surgery alone versus different populations that are at a higher risk for relapse and see if we can improve the outcome of the high-risk patients by treating them with chemotherapy and monoclonal antibodies,” Benson says. “It represents where we think our field needs to move in the direction of definite prognostic and predictive markers.”

Benson’s work comes with the reward of seeing patients survive and thrive. But first, they must understand what their treatments are doing for them. For this reason, Benson believes not only in better guidelines for care, but better use of drugs in trials and treatment.

“I feel that the field of oncology is under intense pressure to demonstrate that we can integrate evidence-based oncology,” Benson says. “Part of that pressure is because care is very expensive and new drugs developed come at a huge cost. It behooves us to understand how we can best use these drugs.”

Understanding complex issues has been a way of life for Benson, who won the 1971 RFK Journalism Award for his medical writing at SUNY-Buffalo’s student newspaper. Though he loved journalism and sees its parallels to medicine, discovering new ways to help people through medicine is what he has always strived for.

“This has been a lifelong ambition; there’s nothing else I ever imagined doing,” he says.