

Philip John DiSaia, MD: Available Light & The Origin of Storms

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Abstract

During a career, which spanned nearly 60 years, Professor Philip J. DiSaia (1937–2018) trailblazed a path forward in academic medicine, which would become the standard by which Departments of Obstetrics and Gynecology and Gynecologic Oncology Divisions and Cancer Centers would be measured throughout the United States, in Europe and Japan. Following his discovery of fetal warfarin syndrome as a resident, DiSaia would serve in the U.S. Navy and successfully compete for an American Cancer Society Grant that would fund his Fellowship in Gynecologic Oncology under the instruction of Dr Felix N. Rutledge at the MD Anderson Hospital and Tumor Institute in Houston, Texas. Dr DiSaia's goal to establish a traditional academic department was realized at the University of California, Irvine, where he remained active in an unprecedented, uninterrupted 42-year run, training many outstanding obstetrician-gynecologists and gynecologic oncologists, future Division Directors, Cancer Center Directors and Department Chairpersons. His dedication to the field and inexhaustible work ethic fueled his many successes in tumor immunology and the clinical trials of the National Cancer Institute's Gynecologic Oncology Group.

Key words: Gynecologic Oncology Group, Irvine, MD, Philip DiSaia, University of California.

Introduction

Following a remarkable career in Gynecologic Oncology, and women's health, Philip John DiSaia, MD passed away peacefully at his home in Southern California on Thursday afternoon, September 27, 2018. He had turned 81 the month before and had spent his entire life in the service of others. To prepare this tribute, the authors turned to Aristotle's *Ethics* and the correspondence between the Van Gogh brothers contained in *Dear Theo*, two books we had discovered through Rush lyricist and drummer extraordinaire

Neil E. Peart (1952–2020) who described them vividly in his memoirs cycling through West Africa. Aristotle states *every rational activity aims at some end or good*. Peart noted that with Aristotle, every word counts, and indeed, it would take several days of contemplation for the authors to comprehend the philosopher's intent. Meanwhile, writing from the south of France where he struggled to understand the universe's purpose for him, Vincent deplored to his benefactor that *art is to console those who are broken by life*. And therein lies the conflict lying at the heart of the eternal 'science vs art' argument, the careful consideration of

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With Gratitude To The Following, Without Whom: PATTI J. DiSAIA, RN, WILLIAM T. CREASMAN, MD, LARRY J. COPELAND, MD, ROBERT S. MANNEL, MD, RONALD D. ALVAREZ, MD, BETH Y. KARLAN, MD, ROBERT E. BRISTOW, MD, JAY S. MASSERMAN, MD, ALBERTO MANETTA, MD, MICHAEL L. BERMAN, MD, AND EDWARD J. QUILLIGAN, MD

which brought the authors full circle around to considering Dr DiSaia's legacy once more.

A clinician-scientist at his core, DiSaia was a study in contradictions, a devout Catholic whose most prized tome was one of the earliest editions of Charles Darwin's *On the Origin of Species by Natural Selection*. He was equally comfortable reading of the *Nephilim* (a race of giants from *Scripture*) as he was studying tumor immunology, with one of his favorite quotes provided by Sir Isaac Newton in a letter to his rival Thomas Hooke in 1676 – *if I have seen a little further it is by standing on the shoulders of giants*. (Parenthetically, the 12th-century theologian John of Salisbury is credited with the earliest version of this phrase stating *we are like dwarfs sitting on the shoulders of giants*.) All of which brings us to William Shakespeare's *The Tempest*. The physical storm created by Prospero's magic to shipwreck the King of Naples and his crew plays second fiddle to the metaphorical storm, which exiles the characters to a mysterious island where the turbulence of passion is ultimately transformed into a force for healing. What follows then is a portrait of DiSaia through the years, of storms he weathered, and of those he created.

The DiSaia Family History and Providence

Philip John DiSaia was born in Providence, Rhode Island on Saturday, August 14, 1937. He and his younger sister by 2 years, Brenda Roland, were the only children of George and Antoinette DiSaia. A second-generation American, DiSaia's ancestry can be traced to the Kingdom of Italy, from where both sets of grandparents had emigrated during the earliest days of the 20th century.

Before coming to the United States, Filippo and Conchetta DiSaia had lived in the region of Molise, a land considered by many to be the clean heart of Italy. Known for its high plains, green valleys and impossible peaks, Molise had originally been settled by the Sunnits when the world was still young. Filippo was born near the ancient Roman city of Sepinum during the latter part of winter, in a region where the mountains would remain covered by snow for many months (Fig. 1). Only one road, used almost exclusively by the postal carriers, led to and from the province, and during the latter half of the 19th century, the important railway of Molise could be found cutting a deep and winding swathe along the



Figure 1 Photograph taken in 1894 in Italy of Dr DiSaia's great grandfather, Egidio DiSaia, giving his son, Filippo DiSaia (Dr DiSaia's grandfather), a watch prior to his leaving for the United States.

seacoast. Family life was centered in Volturmo, where the stained glass of the Abbey of San Vincenzo has depicted the massacred body of the Savior for centuries. It is quite probable that he and his ancestors were mostly involved in the agricultural business and livestock breeding, contributing to Molise's growing reputation in quality grain, milk, oil and wines. The ancient tradition of silver and goldsmithing was especially important to the family.

Perched atop the eldritch hill in the medieval heart of Campobasso is the Longobard Castle of Monforte. In the cobbled streets below, on the Feast of Corpus Christi, the Festival of the Mysteries was staged. The DiSaia family would often take part in the Procession, which began on Holy Friday at sunset with Our Lady of Sorrows, the Crucified Christ and the Dead Christ being counted among the parading mysteries. Their ancestors may have served as candle bearers carrying candles that may have weighed as much as 70 kg each.

Giovanni and Louisa Rendine Vastano, DiSaia's grandparents on his mother's side, emigrated to the Americas from the region of Campania, famous for its beautiful Amalfitano Coast and the Isle of Capris with its breathtaking, limestone Arch of Love. The Vastano family had lived in Campania for countless centuries, having somehow managed to survive earthquakes, volcanic eruptions, international intrigue, foreign domination, civil war and pestilence.

Arriving in the States via New York, the DiSaia(s) and the Vastano(s) would settle in Providence, Rhode Island, raising six children in each household, including Phil's father, George and his mother, Antoinette. The word 'providence' is synonymous with the care, guardianship and control exercised by a deity or divine direction.

As a child, Phil lived in many apartments that his family rented until the age of 10 when his father purchased a home on 83 Daboll Street near Roger Williams Park (Fig. 2). He recalled having enjoyed schoolwork, baseball and playing table games. The only childhood friends that he would continue to keep in touch with were his many cousins, all 20 of whom lived in Providence neighborhoods or in close surrounding areas. Religion was very important to the DiSaia(s). The family regularly attended Roman Catholic services, including Vespers, and the children went to Sunday school.

Grandfather Filippo died of pneumonia when Phil was an infant. Grandfather Giovanni Vastano was a diabetic who lost both lower limbs. He lived with the family, and Phil remembered him as a very wise,

kind, fun-loving philosopher who would have a great influence on his grandson. His wife, Louisa, died in childbirth.

Phil's earliest memories growing up in the ghettos of Providence included Sunday afternoon dinners, his grandmother Conchetta cooking meals, their mongrel dog and a family physician making a house call. His mother, Antoinette, was a housewife during this time and also sold Avon out of their home. She was devoted to her two children, her widower father, Giovanni and her two maiden sisters. Phil's favorite memory was her encouragement of schooling and concern that there be a quiet corner for children to study. His least favorite memory was the cod-liver-oil he was made to ingest daily!

George DiSaia was a serious man with really no excesses. He worked as a clerk for 35 years in the Brown & Sharpe factory, where Filippo had worked for 30 years. The strongest image Phil had of his father was that of baseball. He loved watching and following baseball, and would occasionally take his son to Boston to watch the Red Sox and Ted Williams play. Reflecting on the family finances, Phil noted they were very poor and always just getting by. George rented the first floor of their duplex home to Phil's two maiden aunts who both worked in the costume jewelry industry, and this helped to some degree.

These early years were dominated by World War II, which ended on Phil's birthday on August 14, 1945. In his own words, *I remember my mother putting me to bed early on the 13th because I would be up late*



Figure 2 At 10 years of age (1947), Philip DiSaia appears in his Cub Scouts uniform.

on the 14th for my birthday party. At about 3 am I was awakened by a noise in the street. Neighbors were out celebrating the end of the war. We joined them. In Rhode Island, August 14th remains a State Holiday.

Phil was closest to his mother during adolescence. His first job was a paper route at age 11 for *The Providence Journal*, which has remained the oldest continually published daily newspaper in the United States. To date, this newspaper has won four Pulitzer Prizes. Phil attended Gilbert Stuart Middle School, which still stands in the heart of the Elmwood section of Providence. Built-in the early 1900s, the school originally housed elementary school children. The surrounding neighborhood consisted of abandoned houses and buildings, as well as newly renovated schools, houses, businesses, social service agencies, churches and community organizations. To this day, the students of Gilbert Stuart still represent a melting pot of nearly 50 different cultures. In 1950, Phil was given a Merit Badge in Public Health by the Boy Scouts of America.

Phil moved on to Classical High School in 1951 (Fig. 3). Classical High was known for its competitive entrance requirements for students intending to go on to college. Founded in 1843 as an all-male school (it was coed by Phil's time), Classical High remains a college-preparatory public magnet school. Its motto, the Latin phrase *Certare, Petere, Reperire, Neque Cedere*, is a translation of the famous phrase taken from Sir Alfred Lord Tennyson's *Ulysses* "To Strive, to Seek, to Find and Not to Yield". The school serves a diverse community and



Figure 3 Photograph of Philip DiSaia from High School.

provides its students with the means to achieve high standards in a rigorous learning environment. At Classical, Phil and his classmates were required to study Latin for 4 years, 2 years of a foreign language, ancient history and mathematics and calculus. Inherent in the school's mission statement was the goal that its graduates would demonstrate leadership within the community.

Phil loved history subjects and was particularly fond of ancient history. His least favorite subject, however, was German literature. He recalled his Latin teacher as having been very influential during those formative years. Although baseball remained his first love and Ted Williams his teen idol, he was exceptionally competitive on Classical High's Track Team. He did not care much for the student body government but immersed himself in the editing, production and publication of the school yearbook, *The Caduceus*. A caduceus appears as a winged staff with two snakes wrapped around it. As an ancient astrological symbol of commerce, it was associated with the Greek god Hermes, messenger for the gods, conductor of the dead, and protector of merchants, thieves, gamblers and alchemists. The caduceus was adopted by alchemists as their symbol, and as coincidence would have it because alchemists were the mainstay of ancient medicine, the symbol became associated with the healing arts.

Phil described himself during adolescence as a quiet, B+ student who worked after school initially, with his large newspaper route, and at the age of 16 landed a job as a checker at the A & P Grocery Store. The store offered a wide variety of merchandise and services, including the Company's own Eight O'Clock Coffee, self-service meat counters, baked goods, produce and seafood. Phil recalls the A & P as his best job during his high school years (his worst was when he was a janitor). As a result of having to work after school almost daily, he was unable to participate in many extracurricular activities. He did, however, save enough money from his newspaper route to enable him to purchase his automobile at the age of 16, a blue '46 Plymouth Coupe.

Whether he was on his paper route, packing groceries at A & P, or working late on the yearbook, Phil could often be seen wearing powder blue trousers pegged at the ankle with a double saddle stitch on the legs. He loved listening to Antoine Dominique "Fats" Domino (and later, Chubby Checker) whose biggest hit, the 1956 uptempo version of the old song *Blueberry Hill* remained at #1 on the R&B charts for 11 weeks. He remembered his first girlfriend, Roseann as a tiny, pretty girl who lived across the street. Phil

remained in touch with his closest childhood friend, Clark Sammartino, who went on to become a very prominent oral surgeon in Providence.

Phil's favorite restaurant was Twin Oaks in Cranston, Rhode Island. During Prohibition in the late 1920s, the restaurant's founder William deAngelus Sr distilled whiskey to sell to his friends, with the basement of his home becoming a speakeasy. After Federal Agents destroyed the distillery, Twin Oaks was born. It had two small private dining rooms that held only 16 people, and the main dining room, which could accommodate up to 40. William's wife Eva prepared all the food, and he cooked it. The restaurant grew very quickly due to the excellent food and reasonable prices, which have been maintained to this day.

Phil consistently made the Honor Roll at Classical High and graduated in 1955 at the age of 18 with a scholarship to Brown University (Table 1). Founded in 1764 as Rhode Island College, Brown University is the third-oldest institution of higher education in

New England and the seventh oldest in the United States. A member of the Ivy League, it was one of the nine colonial colleges chartered in the American colonies before the American Revolution, and the first college in the United States to accept students of all religious affiliations.

Brown University, Tufts University, Yale University, and Lemoore Naval Air Station

Phil lived in the Plantations House dormitory and made fast friends with roommate Lenny Santos. The University had renovated the former Lambda Chi Alpha house at 32 George Street, furnishing a lounge and study rooms on the first floor and dormitory accommodations on the upper floor. The concept of Plantations House was to give commuters a place to meet and study during the day and a place to stay overnight after evening functions. The students built party rooms in the basement, fielded intramural teams, and invited faculty guests to Wednesday night discussions. Phil served first, as Vice President, and then as President of his dorm house, and was also a member of the Newman Club for Catholics. He started Brown as an engineering major but soon switched to pre-med.

Reflecting on his days at Brown University, Dr DiSaia shared many American's sentiments that the 1950s were a great period. He was unable to recall a single episode of anger or violence on campus, with most of the excitement occurring during panty raids when Brown men would march up to the Pembroke dorm and sing chants, under fear of suspension from the university if any were caught throwing or catching a pair.

Scholarship funds lasted throughout his 4 years at Brown, and he supplemented his income by working two to three afternoons each week at a sandwich shop and on Saturdays as a checker in a Providence supermarket. Although Art Appreciation and European History were his favorite courses, during his final 2 years at Brown he switched, from Engineering and focused on becoming competitive for entrance to medical school. Having been raised in poverty, Dr DiSaia had learned early on that to make the most of himself hard work was going to be essential, and he appreciated what little he had been given in life. He lived very much in the present, savoring each day's

Table 1 Philip J. DiSaia, MD – Education

Degree	Institution	Years
Bachelor's of Arts, Biology, Cum Laude	Brown University Providence, Rhode Island	1955–1959
Doctor of Medicine, Alpha Omega Alpha, Cum Laude	Tufts University, Boston, Massachusetts	1959–1963
Internship, General Surgery	Yale University, New Haven, Connecticut	1963–1964
Residency, Obstetrics & Gynecology	Yale University, New Haven, Connecticut	1964–1967
Military Service, Lieutenant Commander	United States Navy, Lemoore Naval Air Station, Kings County, California	1967–1969
Fellowship, Gynecologic Oncology	University of Texas, MD Anderson Hospital, Houston, Texas	1969–1971
Honorary Medical Degree, Laurea Honoris Causa Medicine & Surgery	University of Genoa, Metropolitan City of Genoa, Italian Riviera, Italy	21 Jan 1999

lessons (he made A grades in every course), evenings with his friends for a game of cards and weekends with family. Under such circumstances, he could have been forgiven if he had selected a trade without much challenge and continued to live out the rest of his years anonymously in Providence. After marching down the hill upon which the University sits to the First Baptist Meeting House of the United States, in June 1958, at the age of 21, Philip was awarded the Bachelor of Arts degree surrounded by colorful Marshalls in full academic regalia, his parents, sister and two aunts (Fig. 4).

He had only applied to Harvard and Tufts medical school and was admitted to the latter. His mother had always wanted him to go into medicine, and for himself, Phil wanted out of the ghettos with a profession with a chance to do some good and make a decent living so his children would not have to work through school as he had done. Role models at Tufts included Douglas Marcharet of the Department of Obstetrics and Gynecology and his Chairman George Mitchell, who would both become founders of the Society of Gynecologic Oncologists.

Through lucrative summer jobs and as a member of the U.S. Navy Ensign 1915 Program, Phil was able to live relatively comfortably during medical school, which he compares to 21st century curriculums as having more emphasis on patient care and less on drug development and associated science. During those days of the late 1950s, the structure of DNA had only



Figure 4 Philip DiSaia photographed with parents, George and Antoinette DiSaia upon graduation from Brown University.

recently been discovered, and the fields of Molecular Biology and Genetics had not yet evolved. His favorite courses were Anatomy and Physiology. Clinical rotations were characterized by long hours with more time “in the field” at the old Boston City Hospital and the uptown Tufts-New England Medical Center. Students did not log hours in those days and carried out their assigned duties and left the hospital only when their work had been completed. They also went into the ghettos to render house calls to the poor.

Phil was elected to the Alpha Omega Alpha Medical Honor Society during his third year and graduated #3 in a class of 114. Despite not wanting to become a “belly surgeon” (he preferred studying to be a Gynecologist with an emphasis on surgical problems and infertility), Dr Mitchell convinced him to first train for 2 years in General Surgery (as he had done) to learn discipline and test his stamina. There were no “match processes” for residency selection in those days, and following an interview by the General Surgery Department at Yale, Phil was accepted to the program in New Haven. His monthly salary was \$125.00, and he lived in the hospital in a small room without a roommate. Phil was on call every day, every other night and every other weekend. When he was able to get into the operating room as an intern, he repaired hernias, performed vein strippings, appendectomies and several hemorrhoid procedures. He recalls repairing a pediatric hernia when a nurse came into the room to announce the tragic news that President John F Kennedy (especially loved in New England) had been assassinated on November 22, 1963. (Nearly 57 years later on March 27th 2020, with most of the country sheltering at home amidst the COVID-19 pandemic, Nobel Laureate Bob Dylan would release the 17-minute *Murder Most Foul*, lamenting JFK’s assassination and the death of the American Dream.)

After 2 years Phil joined the Ob/Gyn Residency Training Program at Yale, making lasting friendships with his classmates, Charles Brinkman III (2 years ahead), Leon Speroff (1 year ahead), John Hobbins (1 year behind), Robert Resnick (2 years behind), Gordon Phillips and Marshall Holley. The Chief of Obstetrics was Edward Hon (who would use his electrical engineering background to develop the fetal heart rate monitor with Phil’s principle role model at Yale, Edward J. Quilligan), the Chief of Infertility was Nate Case, and the Chief of Gynecologic Oncology was John McLean Morris (aka Black Jack) who had provided the first full description of testicular feminization syndrome in 1953 and developed the morning-after pill.

In those days, women in premature labor were given intravenous ethanol. The residents performed all of the obstetrical anesthesia procedures, including spinal, epidurals and occasionally light general anesthesia. Phil was also trained in all forceps applications, including Keiland's, Piper's and Barton's forceps. With a national Cesarean section rate of only 3%, he delivered at least 50 vaginal breeches, and the majority of second twins were delivered by version and extraction. At Yale, Phil performed 50–60 abdominal hysterectomies, and 75–100 vaginal hysterectomies, which was the main method of sterilization during a time when sterilization *per se* was illegal. Phil served as an assistant only on radical hysterectomies, pelvic exenterations and many ovarian cancer debulking procedures. With so very few choices, chemotherapy in those days consisted of chlorambucil and nitrogen mustard. While Williams' *Obstetrics* and Leon Israel's *Gynecology* textbooks were widely studied, there were no texts in Gynecologic Oncology.

Unlike medical school, Phil found time to become involved with research during residency. He was among the first to perform electroencephalograms on fetal brains in labor, prompting Quilligan to encourage him to become a fetal neurologist (Black Jack wanted him to train in cancer surgery). During this period, Phil also reported the congenital anomaly of coumadin therapy in his classic paper on the Warfarin Syndrome,¹ and would soon become certain he wanted an academic career. However, the socio-political-economic climate was dominated by the Vietnam War, and all doctors were subject to being drafted. The above-mentioned Navy Ensign 1915 Program allowed him to complete residency on condition of the immediate draft upon graduation (Fig. 5).

Phil's first two sons, John Phillip and Steve Dwight were born at Yale New Haven Hospital in 1964 and 1966. When time permitted, he and his wife would catch a Saturday matinee performance at the Metropolitan Opera and occasionally go to a New York Giants game. With no graduation ceremony from Ob/Gyn Residency Training at Yale, the family went to a restaurant as, by then, Phil was making \$4000.00 per year.

Phil was stationed to a small hospital at Lemoore Naval Air Station in California, where the air was hot and dry. There was no rain, no snow, only periods of dense fog. Unlike in New England, one could grow plants year-round. The town only had 6000 people. Phil's annual stipend was \$12,000 along with free housing on the base, approximately 500 yards from the hospital. When he was promoted to Lieutenant Commander, his stipend was increased by 5%.



Figure 5 Philip DiSaia photographed during his years in the U.S. Navy.

Phil's orientation to naval life took place during the 2 weeks he was on *The Midway* carrier. A harrowing experience was being in the second seat of a trainer fighter plane landing on an aircraft carrier – he was frightened to death and was vomiting into his oxygen mask while simultaneously holding back his diarrhea (Fig. 6). Phil also somberly remembers accompanying the base Commander to the home of a widow following the loss of an aviator who had been shot down, in case she needed medical assistance. Many of the bombings in Vietnam were off carriers, and the pilots were stationed at Lemoore. The Vietnam War was at its peak from 1967 to 1979, and Phil came close to going there on two occasions, but his busy schedule at Lemoore held him back. He performed 275 hysterectomies during his 2 years of service and 150 deliveries each month (the Cesarean section rate was 4%). Phil had one partner, Fuller McBride, with whom he shared a great camaraderie. Phil taught the general surgeon Rick Hicks how to perform an abdominal hysterectomy, and in return, he was taught cholecystectomy. The flight surgeon Byron Regal schooled Phil on California wines. He recalls navy people as the finest he had ever met with aviators being the "cream of the crop".

MD Anderson and the University of Southern California

When his naval commitment ended, Phil confessed to Quilligan that becoming a fetal neurologist was not



Figure 6 Photograph of Philip DiSaia flying a U.S. fighter plane.

going to be satisfying. Black Jack spoke over the phone with Felix Noah Rutledge in Houston and told Phil that “you are going to MD Anderson”. With naval salaries not being very large, travel for interviews was usually performed by “hopping a flight” when one was in full uniform, and the plane was going in your direction. Phil took a transport to Ellington Air Force Base outside of Houston, slept in the bachelors’ office quarters, and the following morning the base provided a jeep and driver to take him to his interview. He met Rutledge at 06.30 hours and together made rounds with the fellows and Julian Smith, the father of multi-agent chemotherapy for gynecologic cancers. The rest of the day was spent in the operating room and in the clinic.

Phil successfully competed for a grant from the American Cancer Society, which funded his Fellowship at MD Anderson. All services were run efficiently by faculty and fellows, as there were no residents. The President, R. Lee Clark, was a general surgeon with an intense interest in cancer therapy and had very specific orders for everyone. To Phil, it was like being back in the military, and to rub salt into the wound, his annual stipend was only \$10,000.00, and he had in-house call every fourth night.

Rutledge was always a gentleman and never raised his voice. If he was angry, he would begin by calling you “doctor”. His rules of traction and counter-traction, “work where it’s easy, and the tough spots become easy”, gentle handling of tissue, and use of sharp dissection (the Bovie was *never* used by Rutledge) would

inform Phil’s own principles of teaching of surgery for the subsequent four decades. Rutledge himself had completed three residencies in gynecologic surgery, radiation oncology and pathology. His surgical lineage could be traced back to James Marion Sims (1813–1884) who is remembered as the Father of Gynecology for inventing the Sims’ speculum and developing the surgical technique for repair of vesicovaginal fistula resulting from obstructed childbirth in Montgomery, Alabama. Sims was among the appointed trustees of the Ephraim McDowell Memorial Fund to provide a local memorial for that Father of Abdominal Surgery (1771–1830) from Danville, Kentucky who, on Christmas morning of 1809, without anesthesia, antibiotics, blood-banking or even knowledge of anti-septic technique, successfully performed the first laparotomy for removal of a large ovarian tumor from a Ms Jane Todd Crawford (1763–1842), a woman who would outlive her surgeon. Sims would go on to train Howard Atwood Kelly (1858–1943), the gynecologist who, along with William H. Welch (1850–1934; pathologist and medical school Dean), Sir William Osler, 1st Baronet (1849–1919; internist who took students out of the lecture hall for bedside clinical teaching), and William Stewart Halsted (1852–1922; a surgeon who established the first surgical residency training program and developed the radical mastectomy for breast cancer) founded Johns Hopkins University in 1876. At Hopkins, Kelly would establish Gynecology as a specialty, develop the Kelly clamp, the Kelly forceps, and an improved cystoscope, and train the Canadian gynecologist Thomas Stephen Cullen (1868–1963) who is credited for sending surgical specimens out of the theater for an intraoperative rapid mandatory frozen section. Cullen, in turn, trained Richard Wesley Telinde (1896–1991), the third Professor of Gynecology at Hopkins, who published the first edition of his seminal textbook, *Operative Gynecology*, in 1946. Telinde trained Rutledge, the first Gynecologic Oncologist.

Other important figures at MD Anderson included Joseph Sinkovics, a medical oncologist who taught Phil basic laboratory skills, and Marc E. Delclos, who had remarkable abilities for interstitial brachytherapy and could perform the procedures without a template. Phil also operated frequently with William T Creasman, who was 2 years ahead; they studied together for the basic American Board of Obstetrics and Gynecology examinations (Figs 7 and 8).

Then, as now, the etiology of ovarian cancer was elusive, although Woodruff’s talc theory was often discussed. The surgical philosophy of tumor debulking,



Figure 7 Dr DiSaia alongside Dr William T. Creasman (2004).

originated at MD Anderson during the 1960s and Phil performed over 50 of these operations during the fellowship. Postoperative chemotherapy included oral Alkeran, with intravenous doublets and triplets (the first being Adriamycin, 5-fluorouracil and Cytosol) being incorporated around 1967. Malignant germ cell tumors of the ovary were managed with unilateral salpingo-oophorectomy followed by radiotherapy for radiosensitive dysgerminomas. Surveillance was tricky, as there were no tumor markers, CT scans, or ultrasounds during this period.

If one suspected extra-uterine disease, in women with endometrial cancer, 50 Gray of whole pelvic radiation was administered. Otherwise, the uterus underwent Heymore packing with radium or cesium capsules. Because radiation therapy for cervical cancer was stressed by Gilbert Fletcher, during fellowship Phil only performed 20 radical hysterectomies. Rutledge would occasionally allow his fellows to sneak in a radical hysterectomy for young women to avoid radiation. All fellows were required to take a Physics course in the Radiation Oncology Department and learned to prescribe external beam radiation therapy using the 6 and 18 MeV Betatron accelerators. Without the availability of CT scans, radiation fields were designed using bony landmarks. Phil performed 50–100 brachytherapy implants, mainly using the cesium afterloading technique.

During this period, human papillomavirus was not suspected as the cause of cervical cancer, but herpes virus infection was an active theory. Phil recognized that while not all cervical cancer occurred in poor women, most cases of advanced disease did. He performed 16 pelvic exenterations as a fellow, and due to frequent urinary tract infections, the faculty ultimately abandoned the wet colostomy method used during the reconstruction phase in which the ureters were implanted into the sigmoid colon so that urine mixed with feces.

The surgical treatment of vulvar cancer at MD Anderson made use of the Longhorn incision with *en bloc* resection with the scalpel. The femoral vessels were cleared of all nodal tissue, and the saphenous vein was ligated where it joined the femoral vein. There were no vulvar flaps in those days, and the surgical bed was allowed to granulate in. Electron therapy to the groins was used for large matted lymph nodes directly under the skin. Finally, with general surgery training under his belt, Phil performed breast biopsies and placed all of his own vascular ports.

Research was only possible during the nights, weekends and during in-house call whenever time permitted. There was no television at MD Anderson. Working in the Sinkovics laboratory, Phil published two papers with Rutledge on cell-mediated immunity² and tumor immunology,³ one of which was awarded the Best Paper by a Fellow in 1970. Phil also



Figure 8 Dr(s) DiSaia and Creasman flanking Dr Felix N. Rutledge (1995).

won the American College of Obstetricians and Gynecologists (ACOG) President's Award for his presentation at the ACOG Annual Meeting in 1971. Clinical research focused on vulvar cancer and uterine sarcoma, as well as another pivotal collaboration with Rutledge describing the phenomenon of chemotherapeutic retroconversion of immature teratoma.⁴

The Society of Gynecologic Oncologists (SGO) was conceived in February 1968 in the Sky Lite Room of the Monteleone Hotel in New Orleans during an Association of Professors in Gynecology and Obstetrics meeting attended by John J. Mikuta and Hervy E. Averette. The names of likely individuals with training and interest in the area of gynecologic cancer were written on a cocktail napkin and included Rutledge, Michael Newton, Dick Symmonds, John Lewis, George C. Lewis Jr, Denis Cavanagh, Leonard Palumbo Jr and Julian Smith (who took Phil to the first meeting held in Key Biscayne, Florida in January 1969).

Phil recalled that the impetus to form a cooperative group dedicated to Gynecologic Oncology was that similar groups had been funded in Medical Oncology. Under the auspices of the National Institutes of Health, the Gynecologic Oncology Group (GOG) was founded in 1970 by a group of gynecologic surgeons who recognized the need for collaborative research. Previously, most clinical trials had been single-institution studies or case reports and lacked the statistical power required to convince physicians throughout the world to adopt innovative strategies. The founding group met in Buffalo in 1971 and

included representation from the University of Buffalo, University of Rochester, New York Medical School, University of Alabama, University of Miami, University of Mississippi, Rush-Presbyterian in Chicago, Duke University, University of North Carolina in Chapel Hill, Pennsylvania State University, MD Anderson, Washington University, University of Utah, University of Arizona, University of California Los Angeles and the University of Southern California (USC).

During Fellowship, the DiSaia family lived in affordable Deer Park in suburban Houston. For graduation in 1971, Rutledge hosted the fellows at an exclusive club as his wife owned an oil company. The fellows that immediately followed Phil were Howard Jones III and Peter Schwartz. Taylor Wharton arrived just as Phil was leaving so he never did any clinical work with him.

Quilligan had moved from Yale to USC and re-entered Phil's life to convince him that a young, ambitious Gynecologic Oncologist was what he needed to round out his Department (for an annual starting salary as an Assistant Professor of \$33,000). Most of Phil's time (and that of his two partners, Duane Townsend and Paul Morrow) was spent at LA County Hospital, although private patients were treated at California Hospital and Good Samaritan Hospital in downtown Los Angeles. Phil also moonlighted at Kaiser Los Angeles to supplement his income, practicing the full spectrum of obstetrics and gynecology.

Although he was provided with a laboratory and a salary to hire a post-doctoral fellow, there was no protected time for research. Small drug company grants enabled Phil to jumpstart his lab, which had as its focus, tumor immunology.^{5,6} His first textbook, *Synopsis of Gynecologic Oncology* by DiSaia, Morrow, and Townsend was published in 1975. The Fellowship in Gynecologic Oncology at USC started in 1972, and Phil's first Fellow was Denny DePetrillo, who would later become Director of Gynecologic Oncology at Princess Margaret Hospital University of Toronto.

On February 24, 1974, Phil and Patti J Collier were married. They had met at MD Anderson during Fellowship when she was the clinical nurse administrator in Dr Rutledge's clinic. Their sons were born at Cedars Sinai in Los Angeles in 1975 (Dominic) and at Long Beach Memorial in 1977 (Vincent).

University of California, Irvine

In 1976, a search committee was assembled to identify a candidate to Chair the Department of Obstetrics & Gynecology at the University of California, Irvine (UCI). Among the members were Long Beach Memorial Medical Center (LBMMC) perinatologist and UCI volunteer faculty member, Roger K. Freeman, and Krishna K. Tewari from the Department of Molecular Biology and Biochemistry in the School of Biological Sciences at UCI. Upon the recommendation of the committee, Dean Stanley van der Noort successfully recruited DiSaia. At that time, Quilligan was stepping down from Chair at USC and in his own words, DiSaia was 38 years old and ambitious, with clinical research focusing on more conservative surgical approaches for early vulvar cancer,⁷ and surgical staging of endometrial cancer.⁸⁻¹¹

The reputation of the Department of Ob/Gyn at UC Irvine was non-existent when DiSaia took over. There were four faculty and two secretaries. The former Chair, James H. McClure had obtained a residency program as a core curriculum in 1963 and had suffered an acute myocardial infarction in 1972, underwent carotid artery surgery, and resigned in 1973. Benbow Thompson, a dedicated faculty member and excellent gynecologic surgical teacher for the residents, was Acting Chair until DiSaia's arrival and remained a constant source of advice for the new Chair in the years that followed.

DiSaia was given 14 state FTE(s) and planned a traditional academic department (Table 2). Quilligan

was brought in to lead the Maternal-Fetal Medicine (MFM) Division (Fig. 9), and Thomas J Garite (Chief Resident at UCI when DiSaia arrived and future UCI MFM Fellow) would later succeed Quilligan when the latter was appointed Dean of the UCI School of Medicine. To establish a Division of Reproductive Endocrinology and Infertility (REI), Sergio C. Stone was recruited from USC. Jose Balmaceda and Ricardo H Asch (pioneer of gamete intrafallopian transfer) from the University of Texas, San Antonio also moved to UCI, bringing with them their laboratory personnel and biologist. According to DiSaia, Asch and Balmaceda put UCI on the map for REI (in more ways than one).

Cooperative group trials led by the GOG and sponsored by the National Cancer Institute were opened in 1977, with DiSaia's GOG membership transferred from USC during an era when there was less red tape. To help provide Gynecologic Oncology services, he brought William Rich with him from USC and after Rich's departure 4 years later, he offered a position to Michael L Berman from the University Pittsburgh Medical Center MacGee-Women's Hospital. Berman joined the Department in 1981 and remained DiSaia's partner for the next 37 years, serving as Division Director from 1981–1991, and as Fellowship Director from 1985–2007. Over the years leading up to his death in 2018, in chronological order, the following Gynecologic Oncologists joined the Division: Mark A. Rettenmaier, Alberto Manetta, Matthew F. Kohler, Sergio Pecorelli, Bradley J. Monk, Robert A. Burger, Wendy R. Brewster, Krishnansu S. Tewari (Division Director 2017-present), Leslie M. Randall, Robert E. Bristow (Division Director 2010–2017) Ramez E. Eskander, Kristine R. Penner, Fabio Cappuccini and Jill H. Tseng.

During the mid-1970s, Ob/Gyn Residency Training Programs were run in parallel at UCI and LBMMC. Freeman and DiSaia concluded that they should be integrated into one program under UCI. DiSaia successfully annexed LBMMC, paving the way for a unique collaboration between a community hospital and the university, which has continued for over 35 years. Medical students, Residents from numerous departments, and Gynecologic Oncology Fellows rotate through LBMMC, providing clinical care and participating in medical education. Critical to this endeavor and a driving force behind establishing this unit was S. Gainer Pillsbury, a future LBMMC Chief Medical Officer and close friend to DiSaia. To augment the surgical training in the Residency, DiSaia

Table 2 Philip J. DiSaia, MD: Notable accomplishments

Accomplishment	Comment	Years
Traditional Academic Department of Obstetrics & Gynecology	University of California, Irvine – Medical Center, Orange, California	1977-present
Elite Residency Training Program in Obstetrics & Gynecology	University of California, Irvine – Medical Center, Orange, California	1977-present
Prestigious Fellowship Training Program in Gynecologic Oncology	University of California, Irvine – Medical Center, Orange, California	1977–1985 (3 year program)
<i>Clinical Gynecologic Oncology</i> (P. J. DiSaia & W. T. Creasman, editors)	2017 9th Edition	1986-present (4 year program) 1981 1st Edition
Molecular Biology & Biochemistry Research Corridor with Gynecologic Oncology Fellowship	School of Biological Sciences, University of California, Irvine, Irvine, California	1983-present
National Cancer Institute Clinical Trialist Group Grant	\$586,110 over 10 years, Principle Investigator, Gynecologic Oncology Group	1989–1999
The Philip J DiSaia, MD Society	First President: Jim DeSoto, MD	Established 1991
National Institutes of Health T32 Fellowship Training Grant	\$850,000 over 6 years Principle Investigator (5 consecutive awards)	1993-present
The Philip J. DiSaia, MD Chair	Endowed Chair in Gynecologic Oncology (Current Beneficiary & Occupant: Krishnansu S. Tewari, MD)	2012
The DiSaia Visiting Resident Program	For 2nd and 3rd Year Ob/Gyn Residents with an interest in Gynecologic Oncology	Established 2019

negotiated a highly popular Kaiser rotation, which also exists to this day. Under his direction, the Residency Program gained a national reputation and continues to be highly sought after.

Before a formal Fellowship Training Program in Gynecologic Oncology was established at UCI, fellows were shared with USC, including Leo B. Twiggs and Edmund S. Petrilli. Although he was able to establish a few cell lines through tissue culture studies,¹² when his full-time basic scientist retired, DiSaia recognized that his laboratory was not adequate for Fellow education. At this point, he reached out to Krishna K. Tewari who had been on his search committee and was now Chair of Molecular Biology & Biochemistry. Together they established a two-way corridor of basic science collaboration and translational research, providing Fellows the much-needed scientific mentorship in oncology from nationally recognized scientists. Always interested in training future academics, the extension of the Fellowship from 2 to 3 years in 1980 with UCI's first female Fellow, Patricia S Braly, and then becoming the first four-year Fellowship in the country with Joan L Walker in 1986 was a natural progression, which allowed more time in the laboratory. In the mid-1990s, DiSaia would successfully compete for the first of five consecutive NIH T32 Training Grants to fund the two research years of the Fellowship. Former

Fellows from 40+ years of the program's existence include leaders in academia, the National Cancer Institute, clinical trial design, translational science, surgical innovation, global health, health maintenance organization service lines, military medicine, biotechnology and pharmaceutical enterprise, including Robert S. Mannel, Ellen Sheets, Richard E. Buller, Cynthia Macri, Groesbeck Parham, Joseph A. Lucci III, Bradley J Monk, Robert A Burger, D. Scott McMeekin, G. Scott Rose, Wendy R. Brewster, S. Diane Yamada, Michael T. McHale, Noelle Cloven, John K. Chan and Devansu S. Tewari.

During 1982, DiSaia had been invited to Indiana University to serve as a judge for the Ob/Gyn Department's first Residents' Paper Day, and with Garite's help, he established a Paper Day at UCI in 1983. Residents' Paper Day requires third-year Residents to present an interesting case and fourth-year residents to present a research project that will serve as their thesis for graduation. Highly respected academicians throughout the country have served as Paper Day moderators. Toward the end of the 1990s, the Residency continued to attract the best candidates, with half going into Fellowships, including Tamerou Asrat (MFM), Julianne S Toohey (MFM), Felicia L Lane (UroGyn), Noelani Prietto (UroGyn), Elizabeth Geller (UroGyn) and Sharon E Moayeri (REI). Although the private practice was also popular with



Figure 9 Dr DiSaia surveys the University of California, Irvine campus with Dr Edward J. Quilligan (1980).

the graduates, by the mid-1990s, positions with the Kaiser Permanente Medical Group were also gaining traction. Notable former Residents that have obtained leadership positions in the community as generalists, include Bruce L Flamm, Allyson M Brooks, Patrick D Roth, Colleen M Wittenberg, Ann Marie Raffo, Cynthia A Cork and Anita C York.

By 1987, 10 years into his career at UCI as Chair, the Department had a full complement of 16 faculty members, with fellowships in all three subspecialties. In 1989 he was named to the Dorothy J Marsh Endowed Chair in Reproductive Biology, which he would occupy for nearly three decades (Fig. 10). Strong clinical research was underway in each Division, and the Department had healthy reserves, in part due to having approximately 6000 deliveries each year mostly from “department” patients, which provided an excellent revenue stream (Figs 11 and 12). This was also the era of Reaganomics and DiSaia fondly remembers President Ronald Reagan as a “regular guy who would tell us jokes between takes” when he worked for him as a stage-hand on the General Electric Theater Set during the 1950s.

Among the challenges encountered during this period was the establishment of the Gynecologic Oncology subspecialty with pressures coming from General Surgery and Urology as the field was seen as impinging on other territories. In addition, getting 24-hours, 7-days per week coverage on Labor &



Figure 10 Unveiling of the Philip J. DiSaia, MD portrait.

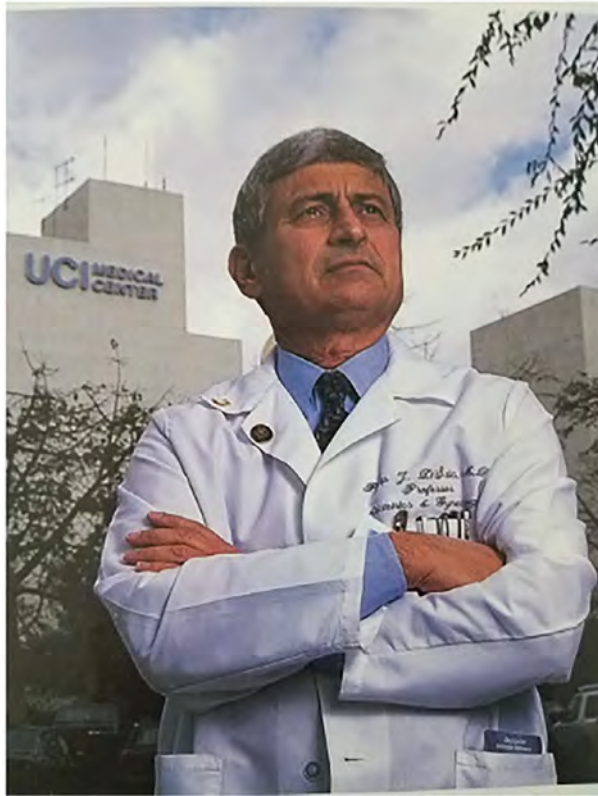


Figure 11 Dr DiSaia photographed at the University of California, Irvine Medical Center.

Delivery by staff who could bill for their services was also problematic. All of the faculty took their turns in-house, but this was not enough. DiSaia addressed this by creating a robust Volunteer Clinical Faculty (VCF) comprised of excellent community clinician-teachers who took great pride in their position, provided in-house coverage, and allowed the Department to retain the revenue generated from staffing deliveries (and emergency department consults). Among the VCF was Jay S. Masserman (who joined the VCF in 1979 and continues to be a great contributor, teaching UCI residents in 2019), Toni Marralle, Marty Feldman, John Ryan, Ron Pennington, Bernice Feldman, Jesus Hernandez, Sia Shahriari, Mark Zepeda, Bruce Flamm, Alan Boucher, Barbara Schwartz, Danny Lichness, Cort Stoskopf, Phyllis Oster, Joyce Kakkis, Andrew "Drew" Y. Senyei and David Plourd. Among the VCF were several former UCI Residents.

During the early 1980s, DiSaia served as President of the Western Association of Gynecologic Oncologists and President of the SGO (Table 3). Although he championed the inclusion of foreign Gynecologic



Figure 12 Orange County Register newspaper article announcing Dr DiSaia's special university and hospital posting to the public.

Oncologists as full members of the SGO, his initial attempts were not accepted and in 1985, the International Gynecologic Cancer Society was formed. DiSaia's vision to transform the SGO into a global society has only slowly materialized.

Following a written request made by DiSaia, the California State Legislature green-lighted the building of a Cancer Center at UCI, with funds allocated in 1988 (Fig. 13). DiSaia provided a Brown University undergraduate student a data management opportunity in UCI's GOG program during her summer recess, and she introduced both her mother and uncle Allen Chao to the cancer program. The Chao Family made a large donation and was rewarded with the naming opportunity. DiSaia then recruited renowned medical oncologist and clinician-scientist, Frank L. Meyskens, from the University of Arizona in Tucson to serve as Director and the Chao Family Cancer Center became one of only 41 NCI-designated Comprehensive Cancer Centers in the country (today there are 53).

Table 3 Philip J. DiSaia, MD: Notable appointments

Appointment	Institution	Years
Associate Professor	Obstetrics & Gynecology, University of Southern California	1971–1976
President	Western Association of Gynecologic Oncologists	1976–1977
Professor (age 39 yrs)	Obstetrics & Gynecology, University of California, Irvine	1977–2010
Chairman	Obstetrics & Gynecology, University of California, Irvine – Medical Center	1977–1989
President	Felix Rutledge Society	1978–1979
Director	Division of Gynecologic Oncology, University of California, Irvine – Medical Center	1977–2010
President	Human Research Committee, American College of Obstetricians and Gynecologists	1981–2002
President	Society of Gynecologic Oncologists	1982–1983
Chairman	Surgical Oncology Research Development Committee, National Institutes of Health	1982–1983
Vice Chancellor	Health Sciences, University of California, Irvine – College of Medicine	1987–1989
The Dorothy J. Marsh Chair	Endowed Chair in Reproductive Biology, University of California, Irvine	1989–2018
Deputy Director	The Chao Family National Cancer Institute-Designated Comprehensive Cancer Center, University of California, Irvine	1990–2010
President	Orange County Unit, American Cancer Society	1993–1997
President	Medical Staff, University of California, Irvine – Medical Center	1994–1997
Director	Parent Board, American Board of Obstetrics & Gynecology	1994–2000
Board of Governors	American College of Surgeons	1998–2002
Chairman	The Gynecologic Oncology Group	2002–2014
President	American Board of Obstetrics & Gynecology	2002–2004
Professor Emeritus	University of California, Irvine	2010–2018
Director	Todd Cancer Pavilion, Long Beach Memorial Medical Center	2012–2017
Presiding Chair	NRG Oncology	2014–2017

On January 1, 1989, DiSaia suffered an arrhythmia while vacationing at his Lake Arrowhead home and lapsed into unconsciousness. His wife (and former nurse) Patti performed CPR and kept him alive, while her father called the paramedics. Upon their arrival, DiSaia was given electric shock treatments, and he woke up. Transport to UCI was by helicopter, and the abrupt drop from Arrowhead's 7000 feet of elevation down to 3000 feet nearly gave DiSaia a second heart attack. Two skilled cardiologists, Michael Brodsky and Byron Allen recommended the prevention of future events through either beta blocker therapy or placement of a new device called an automatic implantable cardiac defibrillator. After 2 seconds of thought, DiSaia suggested they should do both. While recovering in the cardiac care unit, he found work relaxing and continued communicating with his nurse Toni Shubert and his assistant Diane Roberts using his dictaphone. He also had a fax machine set up next to his bed. In those days, computers were not readily available.

DiSaia had always felt that 10–12 years was appropriate service as a Chair and in 1989 had decided to relinquish leadership. By this time, he had developed a national reputation and international presence. He was

leading important work to evaluate the safety and impact on the quality of life of estrogen replacement therapy among breast cancer and endometrial cancer survivors,^{13–15} and studying the tolerability to mother and fetus of neoadjuvant chemotherapy during pregnancy complicated by locally advanced cervical cancer.¹⁶ During this period he had also turned his attention to developing novel therapeutics for advanced ovarian carcinoma¹⁷ clarifying the role of radiation therapy for endometrial cancer,¹⁸ and using full-thickness skin grafts (rather than split-thickness) with the McIndoe neovagina procedure for young women with vaginal agenesis due to Mayer-Rokitansky-Kuster-Hauser syndrome.¹⁹ *Clinical Gynecologic Oncology* (co-authored/edited with William T. Creasman) had emerged as the most highly regarded textbook in the subspecialty and a commitment from the publisher to issue a new edition on a five-to-six-year timetable. The Philip J. DiSaia, MD Society was established by former Residents in 1989, and the first President of the Society was Jim DeSoto. The annual meeting features two lectures from Departmental Faculty and coincides with the Resident Paper Day.

Once Thomas Garite had been confirmed as Department Chair, DiSaia returned to the role of Division



Figure 13 Dr DiSaia photographed in his office on the 4th floor of the University of California, Irvine's Chao Family National Cancer Institute-Designated Comprehensive Cancer Center.

Director, and would weather storms of a different nature in the ensuing years (Fig. 14). (Garite would be succeeded in 2006 by MFM specialist Manuel Porto, who as a Harbor UCLA resident rotating through Long Beach Memorial in the 1980s, would be given the privilege to be the first assistant on a radical hysterectomy with Dr. DiSaia as a measure of appreciation for having spent the entire night before caring for one of his patients when the Gynecologic Oncology fellow was nowhere to be found; that same fellow held retractors during Porto's case with DiSaia.) In 1994, the *Orange County Register* broke the story that Asch, Balmaceda, and Stone had been accused of taking oocytes without permission from patients and following fertilization, transferring the resulting embryos to other women, some of whom conceived. The fertility scandal made the front page of the Register every day during the fall of 1995 for nearly

3 months and the investigations led to the paper being awarded the 1996 Pulitzer Prize for Investigative Reporting. The REI doctors were indicted on charges of mail fraud and income tax invasion. Asch fled to Mexico, Balmaceda escaped to Chile and Stone remained in the U.S. under house arrest for a period of time. Asch was subsequently arrested in 2004 in Argentina, and again in Mexico in 2010, but attempts to extradite him to stand trial in the U.S. have failed. Because Stone was not permitted to cross the stage with the faculty when his son graduated from medical school in 1995, DiSaia (who always felt Stone, having had no involvement with the IVF practices, had been unfairly targeted) took Stone's place to hood the young physician. Ultimately UCI paid out more than \$27 million to settle numerous civil lawsuits. In the aftermath of the REI scandal, reproductive endocrinologist Moon H Kim (a friend to DiSaia and Associate Editor of the *American Journal of Obstetrics and Gynecology*) joined the Department to provide residents with endocrinology didactics and ultrasonography clinical modules as the university had done away with the REI Division (possibly permanently). Asch and Balmaceda remain fugitives to this day.

During the 1990s, DiSaia traveled to Japan as an invited guest of the country to launch the Japanese edition of *Clinical Gynecologic Oncology*. He was accompanied by UCI perinatologist Yuji Murata who would later be appointed Department Chair at the University of Osaka. He would fondly return to Japan several times as an honored guest (Fig. 15). As work commenced on an Italian edition, DiSaia noted that the Department at UCI and its counterpart in the University of Brescia had exchanged visitors for over 20 years; he invited Sergio Pecorelli to join the Division on sabbatical from 1996–1997, during which time he was very active academically. Pecorelli had previously served a noteworthy term in the office of the President of the International Federation of Gynecology and Obstetrics and would later become Chancellor of the University of Brescia, and ultimately, head of the Italian Food and Drug Administration.

Founded in 1481 by the Council of Elders, the University of Genoa is one of the largest universities in Italy. Situated along the Italian Riviera in Liguria, it has conferred degrees in law, theology, medicine, and the arts for over 500 years. In 1999 DiSaia was conferred an Honorary Degree in Medicine from the University (Fig. 16). Also in 1999, DiSaia was granted an audience with Pope John Paul II who reigned as



Figure 14 The Golden Age of the Division of Gynecologic Oncology at the University of California, Irvine Medical Center, featuring future Society of Gynecologic Oncology President, Dr Michael L. Berman, Dr DiSaia and future Senior Associate Dean of the College of Medicine, Dr Alberto Manetta.

Blessed Pope of the Catholic Church from 1978 until his death in 2005 (Fig. 17). Following the papal remarks to the International Gynecologic Cancer

Society congress, DiSaia kissed his ring. Two years later, on September 11, 2001, his fellow (author KST) called him at home from the hospital at 06.00 hours to



Figure 15 Dr DiSaia in Japan during the Cherry Blossom season (2004).



Figure 16 Upon being conferred an Honorary Degree in Medicine by the University of Genoa, Dr DiSaia is photographed with Dr Sergio Pecorelli (President of the International Federation of Gynecology and Obstetrics and future Chair of the Italian FDA) (1999).

stop him from flying to New York City on American Airlines.

At the turn of the century, the Division was in transition. Matthew F. Kohler had trained under Creasman at Duke University and joined the faculty right out of Fellowship (Fig. 18). After 4 years, during which time

he popularized the phrase “rear admiral” during EEA hook-ups, he rejoined Creasman, this time at the Medical University of South Carolina. Berman was elected President of the SGO in 2001, in part due to his tireless lobbying in Washington, DC on behalf of the Governmental Relations Committee through which Medicare



Figure 17 Dr DiSaia is granted a special audience with Pope John Paul II at the Biennial Meeting of the International Society of Gynecologic Cancer in Rome, Italy (1999).



Figure 18 The Silver Age of the Division of Gynecologic Oncology at the University of California, Irvine Medical Center, featuring Dr Berman, Dr Matthew F. Kohler, Dr Pecorelli (on 1-year sabbatical), Dr DiSaia and Dr Manetta (photograph taken by KST at the University Club in 1997).

ultimately recognized Gynecologic Oncology as a distinct subspecialty. With Alberto Manetta's energies focused on the medical curriculum as Senior Associate Dean, a void in clinical research required filling. DiSaia recruited former Fellows, Bradley J. Monk and Robert A. Burger, to forge a GOG consortium comprised of 11 UCI affiliates throughout the country (Fig. 19).

Upon graduation from the UCI Fellowship in 2002, Wendy R Brewster was given a joint appointment in the Division and Department of Epidemiology. Alessandra Re, a pathologist relocated from Italy, was introduced to DiSaia by Pecorelli and began collaborating with Brewster on epidemiologic studies. Through the support of his colleagues Ramon Cestero and



Figure 19 The Bronze Age of the Division of Gynecologic Oncology at the University of California, Irvine Medical Center, featuring Dr Robert A. Burger, Dr Berman, Dr DiSaia, Dr Wendy R. Brewster and Dr Bradley J. Monk.

Walter F. Berberich Jr, DiSaia negotiated contracts to provide gynecologic oncology services at Arrowhead County Hospital in San Bernardino and at Kaiser Permanente Medical Center in Orange County. This was also the year that DiSaia became both President of the American Board of Obstetrics & Gynecology and Group Chairman for the GOG.

The ensuing 12 years were witness to a transformation in the GOG. Under DiSaia's leadership, the cooperative group conducted several pivotal phases 2 and randomized phase 3 clinical trials that inform current clinical practice in gynecologic malignancies.²⁰⁻⁴³ These include fewer cycles of chemotherapy for early-stage ovarian cancer,²⁰ as well as intraperitoneal chemotherapy,^{21,22} anti-angiogenesis therapy,²³⁻²⁶ weekly dose-dense paclitaxel,²⁷ maintenance therapy,²⁸ and secondary cytoreductive surgery²⁹ in newly diagnosed advanced and/or relapsing ovarian cancer; minimally invasive surgery for clinical early-stage endometrial cancer,³⁰ adjuvant therapy for early-stage and locally advanced endometrial cancer,^{31,32} systemic chemotherapy for advanced endometrial cancer,^{33,34} combination chemotherapy for uterine leiomyosarcoma³⁵ and carcinosarcoma,³⁶ and reduced methotrexate dosing for gestational trophoblastic neoplasia³⁷; palliative chemotherapy³⁸ and anti-angiogenesis therapy for recurrent and metastatic cervical cancer³⁹⁻⁴¹; sentinel lymphatic mapping for early-stage squamous cell carcinoma of the vulva,⁴² and chemoradiation for locally advanced squamous cell carcinoma of the vulva.⁴³ Robust statistical design, high quality translational science and assessment of health-related quality of life through patient-reported outcomes became integral components of GOG trials. In these efforts, DiSaia was greatly assisted by Creasman, Larry J Copeland, Robert S Mannel, James T "Tate" Thigpen, John A. Blessing, Carol Aghajanian, David S Miller, Ronald D Alvarez, Michael A Bookman, Lari B Wenzel, Joan L Walker, David M Gershenson, Frederick B Stehman, Michael J Birrer, Robert L Coleman, Thomas Herzog, Laura L Reese (GOG Administration), Edward L Trimble (NCI), Katherine Y Look (Genentech, Inc), Bradley J. Monk, and Robert A. Burger.

In 2009, upon request of hepatobiliary surgeon Lawrence D Wagman (a colleague who had recently left the City of Hope in Duarte, California to lead the St Josephs Hospital Center for Cancer Prevention and Treatment), DiSaia negotiated a contract to allow the Division to start a Gynecologic Oncology Program literally 10 min from UCI Medical Center. It took 11 months for attorneys at both hospitals to reach an



Figure 20 Dr DiSaia photographed in the Library of the Division of Gynecologic Oncology.

agreement. During this period he also collaborated with the Queen of Hearts Foundation, a not-for-profit organization created by three sisters, Kim Beaudette, Cathy Greinke and Lori Hunter, to honor their mother (Queen) Ann S. Dobbie who died from ovarian cancer. DiSaia created Ann's Clinic to screen patients with documented genetic risk and/or strong family history for ovarian and breast cancer and received \$650,000 to support translational research in a Queen of Hearts Laboratory at UCI's main campus in Irvine.

By 2010, there were rumblings that the NCI would want to consolidate the nine existing cooperative groups into fewer entities. With an eye set to preserve the only group to successfully conduct clinical trials in gynecologic cancer, DiSaia stepped down as Division Director. Robert E Bristow, an internationally recognized proponent of aggressive surgical cytoreduction for advanced ovarian cancer and peritoneal surface malignancies, moved from Johns Hopkins University to assume the mantle. Like Berman before him, Bristow had trained at the University of California, Los Angeles and held his own mentors Dr(s) Leo D. Lagasse (a giant in his own right) and Beth Y. Karlan (former SGO President and current Editor-in-Chief of



Figure 21 The Platinum Era (aka Division re-boot) of the Division of Gynecologic Oncology at the University of California, Irvine Medical Center, featuring Dr Robert E. Bristow (Division Director), Dr Leslie M. Randall, Dr DiSaia, Dr Kristine R. Penner, Dr Krishnansu S. Tewari, Dr Berman and Dr Ramez N. Eskander.

Gynecologic Oncology who was appointed in 2012 by President Barack H. Obama to the National Cancer Advisory Board) to such high regard that he fit in perfectly with a Division accustomed to hero-worship.

The establishment of the Endowed Chair in DiSaia's name had been jumpstarted by an initial donation by the DiSaia's of \$250,000.00 that was matched by Andrew E. Senyei (a distinguished former trainee, VCF member, venture capitalist and inventor) (Fig. 20). This was followed by donations from former students, residents, fellows and grateful patients. As the first \$3 million Chair Endowment at UCI, it was named the Philip J. DiSaia, MD Prestigious Chair in Gynecologic Oncology on January 29, 2012, and given to Bristow, and then transitioned to K.S. Tewari in 2019-2020 (Fig. 21).

Later Years

Unfortunately, in 2010, just when he was transferring the running of the Division to Bristow, DiSaia developed fatigue as the first symptom of acute promyelocytic leukemia. He was very anemic and had an extremely low white blood cell count, necessitating immediate hospitalization under infectious precautions until the diagnosis was confirmed by bone

marrow biopsy. He placed a lot of faith in Lewis Slater one of the first medical oncologists at UCI from the early 1970s. Although his practice was reduced, he accepted DiSaia as his patient and received permission to treat him with the investigational agents, all-trans retinoic acid and arsenic trioxide. While side effects were minimal, DiSaia still had to endure 108 infusions and spent a great deal of time in the infusion center, surrounded by kind nurses who would prepare his room so that he could work on his laptop computer over a 2-to-3-hour period. DiSaia had to miss a GOG meeting, but despite widespread knowledge of his diagnosis, the membership voted unanimously (and without hesitation or deliberation) to appoint him for a third term as Group Chair. He was able to return to clinical work at a slightly reduced schedule after 4–6 weeks, and ultimately achieved a complete clinical, pathologic, and genetic response to therapy, the latter confirmed by the absence of any remnants of the fusion gene by PCR analysis of whole blood.

On September 25, 2015, the American Cancer Society held a banquet in honor of Dr DiSaia's multiple contributions to cancer research (Fig. 22). Five days later, on September 30, 2015, former Resident and Fellow, D. Scott McMeekin succumbed to colon cancer (Fig. 23). He had married one of the UCI residents,



Figure 22 "Twenty Years After" the iconic photograph of the Golden Age faculty is reconstituted on the occasion of the American Cancer Society's banquet in honor of Dr DiSaia's scientific accomplishments.

Cathy Gazzaniga, and his career at the University of Oklahoma had been remarkable. He had risen to Full Professor rapidly and occupied an Endowed Chair. With support from UCI alumni Robert S Mannel and Joan L Walker, he had developed the largest phase I-II center for the study of gynecologic malignancies in the country. In DiSaia's own words, *Scott was a great*

physician, faculty, father and husband – more is not possible. Losing Scott was like losing a son.

As the decade wore on, the NCI-mandated merger loomed before DiSaia, inevitable despite his best efforts to retain the GOG's identity. In the end, the GOG found two willing bed partners and joined with NSABP and RTOG, to form NRG Oncology,



Figure 23 The UC Irvine Division of Gynecologic Oncology photographed with guest lecturer, Dr D. Scott McMeekin (second from left) on the occasion of the Shirley Nissen Lectureship.



Figure 24 Dr DiSaia is flanked by Dr Robert S. Mannel (Chair, NRG Oncology) and Dr, Larry J. Copeland (President, GOG Foundation, Inc).

with DiSaia, Norman Wolmark, and Walter J Curran Jr as the three presiding chairs.⁴⁴ To facilitate collaboration with industry and avoid bureaucratic red tape, DiSaia and the GOG Legacy leadership created GOG Partners as an alternative to the laborious, prolonged path to trial development favored by the NCI. By 2017, GOG Partners had a robust clinical trial portfolio and was housed under the umbrella of the GOG Foundation. At this point, DiSaia turned the management of NRG Oncology over to Robert S. Mannel, and that of the GOG Foundation to Larry J Copeland (Fig. 24).

During his last 2 years, DiSaia continued to see his long-surviving patients in Pavilion 3 at UCI Medical Center, working closely with the Division's

physician assistant Air Force Captain Rachel Montes, and with his long-suffering clinic nurse director, Julie Smith. Several years earlier he had negotiated a deal, which allowed the UCI Division to move their ambulatory practice from across the road from Long Beach Memorial Medical Center (LBMMC) directly on site in the state-of-the-art Todd Cancer Pavilion for which he was appointed Director. Until the end, he continued to work closely with Cathy Kopy in administration, with his nurse Susan Lowenbraun, and the clinician-scientist Dr. Robert A Nagourney, CEO of Rational Therapeutics at LBMMC. He would also spend time with Michael P Nageotte a physician colleague and dear friend of innumerable years.

To paraphrase Texan author Robert E. Howard (creator of Conan of Cimmeria), DiSaia was a man of gigantic melancholies and gigantic mirth. In one aspect, this chevalier sought the most out of life's pleasures, often celebrating graduations by demonstrating uncanny surgical skills by taking a saber to a bottle of champagne. His license plate was personalized with an abbreviation of his favorite wine, Brunello di Montalcino, several cases of which are to be found in his wine cellar. And on the other side was a man so driven to excellence, he transformed the field of women's cancer through collaboration with clinician-scientists with whom he shared goals. He was an incredible mentor who effectively placed the careers of those junior to him ahead of himself. A devoted husband to Patti and father to John, Steven, Vincent, and Dominic, he channeled the commitment to family into the UCI Department he served as a



Figure 25 Patti and Philip DiSaia.



Figure 26 The DiSaia Family in the 21st century.

Table 4 Obstetrics & Gynecology Residents trained by Dr DiSaia from 1976 through 2018 at the University of California, Irvine Medical Center. Residency Directors have included, MFM specialist and former Air Force Captain, Kirk A. Keegan Jr, MD (1981-2006), MFM specialist Carol A. Major, MD (2006-2016), and Laura Fitzmaurice, MD (2016-present)

Class	Physicians
1977	Bernard M. Feldman, Thomas J. Garite, Ronald L. Pennington, John J. Ryan
1978	Jesus N. Hernandez, Daniel F. O'Keefe, Yoram Sorokin, Charles A. Stegman
1979	Edward A. Fischermann, Leonard R. Leon, P. Scott Ricke, John W. Vanderheide
1980	Richard A. Block, Patricia S. Braly, Clifford A. Hancock, Stephen C. Walker, John K. Yee
1981	Alfred L. Cisneros, Ervin E. Jones, Thomas J. Perry, Edwin B. Shackeroff, Sia Mak Shahriari
1982	Dale E. Braithwaite, Katherine L. Brubakjer, Dennis H. Noesen, Gregory A. Skipitis, W. Christopher Slater, Jennifer K. Smith
1983	Ricardo S. Alvarez, Alan R. Boucher, Bruce L. Flamm, Eva Martin, Alfred W. Sloan, Marc A. Zepeda
1984	James A. DeSoto, Gary S. Edwards, Danny L. Lickness, Deborah A. (Malheiro) Ray, Barbara Schwartz, Louis N. Weckstein
1985	Weatherford T. Clayton, Joyce A. Kakkis, Phyllis D. Oster, Paul D. <i>Silva</i> , Cort G. Stoskopf, Karen G. Swenson, Anita C. York
1986	Robert B. Cole, Douglas A. Helm, Christine K. Hrountas, Kurt D. Miller, David J. Plourd, Andrew E. Senyei
1987	Amy L. Abt, Cynthia A. Cork, Paul D. Silva, Cort G. Stoskopf, Karin L. (Weckstein) DeNevi, Norma J. Fuelberth, Brian M. Koperek, Leslie J. (Moberg) Casper, Robin S. (Cruze) Rosen
1988	Tamerou Asrat, Daniel K. Bartlett, Lauren V. Bower, Steven J. Herron, Bradley J. Keith, Anne M. Kent, Robert Koenigsberger
1989	Richard A. Beyerlein, John I. Brady, Julia A. Chapman, Carol M. (Yosenick) Kaminskas, Richard M. Klekman, Amy L. (Christie) Tremper, Marc L. Winter
1990	Marc C. S. Heppard, Deborah A. Jantsch, Karl M. Luber, J. Anthony Ogburn, Joseph A. Rojas, Kirsten B. (Zeffer) Rojas, Kip Taylor
1991	Eve L. <i>Boyd</i> , Jean M. (Costello) Burke, Vicki C. Darrow, Craig E. Juratsch, Michael W. Lew, Steven J. Thomas, Dena R. Towner
1992	Gina M. Angiola, Christine J. Chai, Margarita deVeciana, Janine K. Jensen, Dorothy Kammerer-Doak, Karen J. Nakamoto, Julianne S. Toohey
1993	Colleen M. (Baron) Wittenberg, Allyson M. Brooks, Gladys D. (Espinoza) Inga, Bruce A. Hagadorn, Ilene E. Hatch, Margaret L. Hutchison, Pasquale Patrizio, Kristi M. Van Nostrand
1994	JoD'ann Downes, Russell A. Foulk, C. Terence Lee, D. Scott McMeekin, Nancy D. Rogers, Patrick D. Roth, Anita P. Singh

(Continues)

Table 4 Continued

Class	Physicians
1995	Kelly A. Carter, Catherine A. Gazzaniga, Michele M. Gerber, Julie A. Haugen, Peter Y. Kim, Karen L. Noblett, David C. Walters
1996	Deborah (Anton) Krahrl, Vincent Corcoran, Jennifer A. (Francis) McNulty, Douglas L. Gillott, Amy M. Huibonhoa, Stephen M. Wold, Rodney L. Wright
1997	Ellen J. Fraser, Noelle (Gillette) Cloven, Naomi A. Nagasawa, Linh D. Nguyen, Staci M. Paul, Stephanie R. (Penning) Martin, Ann Marie Raffo
1998	David Ahdoot, Fabio Cappuccini, Lauren D. Hyman, Michael C. Lu, C. Scott Naylor, Rodolfo E. Saenz, Krishnansu S. Tewari
1999	Lisa Agustines, John Chan, Rachel Lopez, Susan Mathison Cohen, Jorge Siopack, Kimberly Suriano, Imelda Tio
2000	Lorraine Y. Chun, Nicté Flores, Catherine Y. Han, Rasha A. Hashad, Thuan D. Le, Kelly D. Robinson
2001	Michael L. Cogan, Julie L. Kuykendall, Christina J. Lee, Meagan M. Moore (Tewari), Dana K. Nakashima, Devansu S. Tewari
2002	Shamsah F. Amersi, Felicia L. (Geas) Lane, Vanessa M. Kaleb, Anna McKeown, Noelani M. (Prietto) Guaderrama, Karen E. Taylor
2003	Christopher Driskill, Pamela Edillon, Stacey S. Fine, Lukas Hartman, Cambria Kang, K. Jennifer Voss
2004	Rhonda Flora, Michael Haydon, Mark Hunter, Enrico Pietrantonio, Sharon Moayeri
2005	Rene Allen, Elizabeth Geller, Sally MacPhedran, Amanda McKinney, Claire Putnam, Priya Rajan, Kim Walters
2006	Hung Ecklund, Esther Friedrich, Stacy Henigsmann, Jennifer Ragazzo, Betty Shen, Vineet Shrivastava
2007	Dana Chase, Caroline Conner, Christopher Donnelly, Robert Ehsanipoor, Alberto Mendivil, Jody White
2008	Tamara Hatfield, Jennifer Jolley, Sacha Kang, Carrie Kim, Danielle Markle, Alejandrina Rincon
2009	Neelu Arora, Elizabeth Burton, Jodilana Hawk, Vinita Jain, Laura Skoczylas, Julia Willner
2010	Marli Amin, Lisa Blair, Rosanne Bravo, Laura Fitzmaurice, Sara (Meltzer) Jordan, Jennifer Salcedo
2011	Amanda Gorman, Brooke Hargrove, Leslie Hsu, Sara Kaplan, Heidi Kraus, Raquel Pelayo
2012	Carol Chiu, Allyson Davis, Steven Samawi, Laura Sech, Megan Stephenson, Morgan Swank
2013	Nora Bassiouni, Justin Diedrich, Cristina Gioioso, Freya Elena Marshall, Natalie Moniaga, Jeanna Park
2014	Taylor Brueseke, Cindy Chau, Kristina Eaton, Teresa (Codini) Longoria, Kerry Price, Erica Wu
2015	James Cripe, Melissa Hodeib, Robert Johnston, Beverly Long, Sarah Lovell, Allison Serra
2016	Elizabeth Bonagura, Revana Lukman, Jennifer Neeper, Jessica Sisto, Elizabeth West, Melisa Westermann, Juliet Wolford
2017	Jacadi Bignami, Jennifer Duffy, Christopher LaFargue, Melinda L. Marshall, Jamie Botelho, Marcie Rome, Jonathan Steller
2018	Kiran Clair, Shelly Dutt, Deborah Karm, Briana Livingston, Sarah Paraghamian, Brandon Sawyer, Rebecca Simon-Freeman
2019	Katherine Coakley, Adam (Brian) Crosland, Catherine Gordon, Nina Hooshvar, Megan Oakes, Lauren Yu, Tasha Serna-Gallegos

foremost steward for over 40 years (Figs 25 and 26, Tables 4 and 5). At his Celebration of Life on Sunday, November 4, 2018, at the University Hills Community Center, hundreds of former medical students (including Anjali Y Hare and Murali Kamath), former and current residents and fellows (including Kiran Clair and Juliet Wolford and her husband Chad Perry), as well as colleagues from all parts of the country, from many parts of the world, listened to and gave their own tributes in his memory (Figs 27 and 28).

Among the memorials was a video testimonial from East Africa prepared by Groesbeck Parham. Decades before he had completed his Fellowship at UCI and moved to Zambia to eradicate cervical cancer, Parham had marched with the Reverend Martin Luther King Jr during the Civil Rights Movement and would later find employment as a bodyguard to guitar wizard,

Jimi Hendrix. Parham reached deep into his soul to describe DiSaia's life and influence as *luminous*. The day ended amidst tears when after Quilligan and Leon Speroff spoke, Creasman, shared his 50-year journey with Phil and the pain he felt at the loss of his dearest friend. And to bring things full circle, Adam Crosland from the Residency Class of 2019 (the last class to have been trained by DiSaia during his 42 years at UCI), spoke last, describing how, as an intern trying to frantically navigate a complex electronic medical record system in order to present a patient to the Professor, DiSaia kindly told him not to worry about what type of cancer the patient had because she did not have cancer – *her daughter had died of cancer and upon her death, the mother transferred her care to me and it has been my privilege to care for her all of these years*.

Table 5 Gynecologic Oncology Fellows trained by Dr DiSaia at the University of California, Irvine Medical Center. Fellowship Directors have included Dr(s). Berman, Brewster, Bristow, DiSaia, Randall, and Tewari.

Graduation year	Gynecologic oncologist(s)
1980	Gazi Abdulhay
1981	Kenneth A. Hodel
1982	William S. Roberts
1983	Patricia S. Braly
1984	Mark A. Rettenmaier
1985	John P. Micha
1986	Paul R. Kucera
1987	Ellen E. Sheets
1988	Suzanne Bergen and Grosbeck P. Parham
1989	Robert S. Mannel
1990	Richard E. Buller and Joan J. Walker
1991	Jeffrey D. Bloss
1992	Joseph A. Lucci III and Cynthia J. Macri
1993	Gary A. Johnson
1994	Julia A. Chapman and Elizabeth A. Grosen
1995	Bradley J. Monk
1996	Cheryl A. Brewer and Robert A. Burger
1998	D. Scott McMeekin and G. Scott Rose
1999	Wendy R. Brewster and S. Diane Yamada
2000	Kristin A. Keefe and Michael T. McHale
2001	Noelle (Gillette) Cloven
2002	Fabio Cappuccini and Krishnansu S. Tewari
2003	John K. Chan
2004	Samuel Im and Annie Yessaian
2005	Huyen Q. Pham
2006	Bahman Saffari and Devansu S. Tewari
2007	Nefertiti C. du Pont
2008	Ernest Han and Mark Hunter
2009	Leslie Randall-Whitis
2010	Troy Gatcliffe and Ali Mahdavi
2011	Dana M. Chase
2012	Thanh Dellinger and Lyndsay Willmott
2013	Danielle D. Jandial
2014	Ramez N. Eskander and Sara Jordan
2015	Fong W. Liu
2016	Lauren S. Krill
2017	Teresa Galvan-Turner
2018	Krista S. Pfaendler and Teresa C. Longoria
2019	Jill A. Alldredge
2020	Lindsey E. Minion and Juliet E. Wolford

The Philip J DiSaia, MD Visiting Resident Fund was established with donations totaling \$280,000 made by Frank Higgins on behalf of his wife Margaret. The DiSaia(s), and Larry J Copeland through the GOG Foundation, have also contributed to the fund, the interest of which will be used to provide housing and a meal stipend to visiting residents from around the country who are interested in spending 1 month in the Division at UCI. Modeled after the Rutledge Fellowship at MD Anderson in Houston and the Brunschwig Fellowship at Memorial Sloan-Kettering Cancer Center in New York City, the “DiSaia Fellow” has been a long-term goal.

On Friday, April 26, 2019, for the first time, DiSaia did not attend the 37th Resident Paper Day and 30th Philip J. DiSaia, MD Society Meeting. From the podium, the 92-year old Quilligan shared that he and DiSaia had a father-son relationship during their near six decades together, with DiSaia often assuming the role of father. Quilligan has always had a reputation for kindness and compassion, a man who could make a hospital janitor feel like a Nobel prize winner and who would always emphasize that it was not how one treated colleagues that mattered but how one treated the people in lower stations. DiSaia took great inspiration from his example for during his time at UCI there was not a janitor, a nurse, a medical assistant, or a trainee whose spouse and/or children he did not know the name(s) of and would never fail to inquire after.

Epilogue

Dr DiSaia announced his resignation as Group Chair of NRG Oncology on Wednesday, July 11, 2017. We are in Philadelphia, the birthplace of the *American Experiment* and to medical education in this country. The juxtaposition is not lost on us. We recognize the enormity of this patriot's retirement set against the backdrop of the American Revolution of 1776, itself inspired by the French insurrection of 1712, from which both the *New Colossus* (our Lady of Liberty) and Aguste Rodin's *Gates of Hell* would be gifted to the New World, the latter residing in the City of Brotherly Love herself. As the 20th century continues to recede along with temporal tides, and the 21st asserts itself, a new aesthetic has arrived, that of eternalism. Everything that has ever happened and will happen, is taking place now.



Figure 27 The authors (KST and BJM) at the Philip J. DiSaia, MD Celebration of Life (Sunday, November 4, 2018).

It is July 2017 and we are at the NRG Oncology Meeting in the Philadelphia Marriot. At dinner, Robert Mannel regales the membership with stories

from Fellowship. It is 2010 and David Miller is with one of the authors (KST) at GOG headquarters in Buffalo and counsels him to learn what engenders such



Figure 28 The Titanium Era (2019-) of the Division of Gynecologic Oncology at the University of California, Irvine, featuring Dr Bristow (Chair), Dr Jill H. Tseng, Dr Randall, Dr Fabio Cappuccini and Dr Tewari (Division Director).

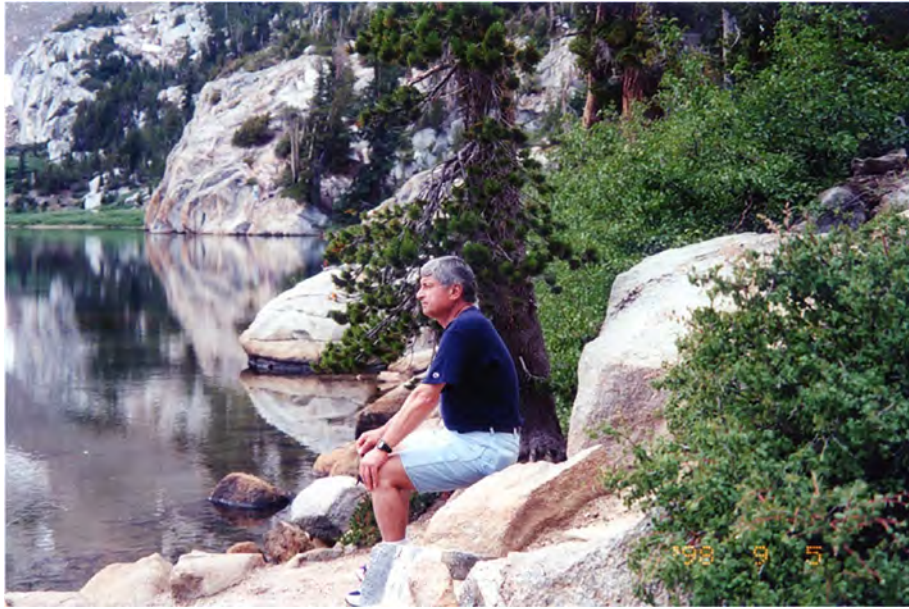


Figure 29 Philip John DiSaia, MD (August 14, 1937 – September 27, 2018).

loyalty to Dr DiSaia. It is 2017 again, and the co-author (BJM) is at the podium, tracing DiSaia's lineage from Rutledge back to McDowell. Outside in one massive migrational wave, a single group splinters from an East Asian population and crosses the Bering Land Bridge between northeast Asia and Alaska, ultimately settling throughout the Americas 23,000 years ago. It is 10,000 AD and Erik the Red drives his dragon-prow vessel west and establishes the first Norse settlement in Greenland; his Viking son Leif Erikson discovers continental North America. On his second voyage to the Americas, Christopher Columbus is accompanied by Diego Alvarez Chanca of Seville, physician-in-ordinary to King Ferdinand and Queen Isabella; he will treat the sea captain for malaria before Columbus is returned to Spain in chains. The Mayflower Compact is signed first by John Carver, and later by Miles Standish. Creasman is speaking now but the microphone is no longer working.

Twenty miles to the north, General George Washington makes camp with his soldiers in Valley Forge. Benjamin Franklin's kite loses its war with the wind and now lies suspended between the soil and the stars. A silversmith makes a midnight ride. Larry Copeland recounts the tale of when he applied to the UCI Fellowship. Not far from dinner, ghosts prowl Independence Hall, reaching through the ether to once again adopt the *Declaration of Independence* and

Articles of Confederation, sign the *U.S. Constitution*, design the American Flag, and turn away when Marquis de Lafayette cracks the Bell originally cast and forged at London's Whitechapel Foundry. Dr Manhattan, a creation of British literary giant Alan Moore, is considering the stars and the revolutions of celestial bodies; he is trying to give a name to the forces that set them in motion. Outside of the Marriot, it is raining in Philadelphia. Who makes the world?

In 2017, KST has stopped listening to the seemingly endless parade of colorful anecdotes and testimonials provided on the occasion of DiSaia's retirement. It is now Thursday afternoon, September 27, 2018, and Patti is opening the front door. Although sedated, his brow furrows when I speak his name and hold his hands in mine. A gentle breeze splashes over us, bringing with it a riot of goldenrods, violets, chrysanthemums and asters from the garden. The sunlight has a spectral quality, recalling the Beltane fires that continue to rage on the Isle of Albion, nestled amidst the archipelago of Avalon at *worlds end* where gravity and alchemy hold court. I am unable to decide whether he is resting peacefully or is angry that all things have their endings. What is clear is how strong he looks so close to the end. I leave the home in denial, not aware he has perhaps a single hour left in this world before crossing the threshold to night's Plutonian shores. I know I will never see him again, this man who

unchained the light, suffusing our subspecialty with a draconian love. DiSaia is at the podium now, in Philly, its 2017, and he is sharing with us his love of biographies, and particularly that of General Douglas MacArthur who accepted the Japanese Instrument of Surrender, which ended World War II over 70 years ago on his birthday. Neil Young's *Into the Black* with the refrain *it's better to burn out than to fade away* emerges from subconscious reservoirs. DiSaia is samurai and is speaking softly (Fig. 29). "In his farewell speech to Congress, MacArthur said *old soldiers never die, they just fade away*." DiSaia pauses for exactly 10 seconds, and then says, "I'm gonna fade."

CONFLICT OF INTEREST

None of the authors report any conflicts of interests related to this work.

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