Iowa grad makes major gift to support craniofacial program

Imagine a lifetime of being shunned and rejected simply because of the way you look after birth. For children born with cleft lip or cleft palate, that is often the reality.

Cleft lip and cleft palate are birth defects that occur when a baby’s lip or mouth does not form properly during early pregnancy. When there is not enough tissue in the mouth or lip area, and the tissue that is available does not join properly, clefting occurs. Approximately one in every 1,000 babies born in the United States is affected by cleft palate, a cleft lip, or both, making the condition one of the most common birth defects in the country.

Efforts to treat the condition received a major boost when University of Iowa alumnus Norm Johnson and his wife, Barbara, provided a $1 million gift to the Department of Otolaryngology – Head and Neck Surgery in the UI Roy J. and Lucille A. Carver College of Medicine. The couple’s gift creates the Paul N. Johnson Professorship in Craniofacial Abnormalities, which will provide ongoing support for a faculty member in the department of otolaryngology whose area of expertise is in craniofacial abnormalities. The UI created one of the first cleft palate programs in the nation in the 1940s and this gift will further its legacy in this area of public health.

“We have been very fortunate in life and are pleased to give this gift to further advancements in cleft palate and other craniofacial deformities,” says Norm. “This gift is in honor of my father, who had a cleft palate and did not benefit from the

“Our desire is to make sure every Iowan born with a cleft lip or palate can get treatment. We also want to help the research program so that the scientific causes can be found.”

—Barbara and Norm (’71BBA) Johnson

“Cleft palate” continues on page 4
Every time Jeff Jensen brushed his teeth, his gums would bleed. He knew he needed to see a dentist but things like work and turkey hunting kept getting in the way. When he finally did make an appointment, Jeff was referred to an oral surgeon in Waterloo for removal of an impacted wisdom tooth. In so doing, the oral surgeon took a routine tissue sample for evaluation. A week later came shocking news. The tissue sample showed that Jeff had oral cancer. It was curable but complicated by the fact it had spread to his jaw bone.

“Right away, I thought the worst,” says Jeff, who was 47 at the time. “I remember wondering if I could make it another 10 years.”

Jeff was referred to the Department of Otolaryngology – Head and Neck Surgery at the University of Iowa. There, Gerry Funk, MD, an otolaryngologist and a member of the head and neck oncology team that includes radiation and medical oncologists, pathologists, nuclear medicine specialists, radiologists, and dental and swallowing specialists, evaluated his biopsy and CT scans. Jensen’s surgical plan included removal of the tumor, reconstruction of his jaw with a free tissue transfer of bone from his leg, and postoperative radiation therapy.

Otolaryngologists at UI Hospitals and Clinics perform about 80 free tissue transfer reconstructive procedures every year. The procedures are most frequently done in conjunction with removal of a head and neck tumor. The procedure is also done for a variety of other reasons, including traumatic injuries and poor wound healing. Funk has performed over 1,000 free tissue transfers during his career. The head and neck oncology team manages more than 300 new cancer patients every year.

Although it was hard to remain positive, Jeff and his wife, Kathi, had confidence in the team at the University of Iowa.

“They kept telling me I was a young and healthy man and that everything would be fine,” he says.

Using the free tissue transfer technique allowed Funk’s team to remove the cancer and then rebuild Jeff’s jaw to look and function like new. The cancerous tissue in the mouth and jaw bone were removed and replaced with soft tissue and bone harvested from Jeff’s lower leg.

“This technique allows for superior reconstruction of many defects that would not be able to be reconstructed using other techniques,” Funk says. “It enables us to be aggressive against the cancer, knowing we can replace large amounts of bone and soft tissue that need to be taken out in order to optimally treat the patient.”
The surgery went well and, after radiation therapy, Jeff has been cancer-free and functions normally with regard to his speech and eating. He participates in a cancer support group and visits the UI Hospitals and Clinics Survivorship Clinic each year.

“I’m really grateful to Dr. Funk for handling the situation so I could go on with a good quality of life,” Jeff says.

For more information about head and neck cancer services at UI Hospitals and Clinics, contact patient care coordinator Nancy Scroggs at 319-384-6487 or visit uihealthcare.org/HeadandNeckCancer/

This story first appeared in Health at Iowa, an online publication for patients and visitors that features the latest information about ground-breaking treatments and the lives they change.

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**OBSERVANCES**

**Thyroid Cancer Awareness Month (September)**  
This annual observance promotes thyroid cancer awareness for early detection, as well as care based on expert standards, and increased research to achieve cures for all thyroid cancer. [See more at thyca.org](http://thyca.org)

**Kids ENT Month (February)**  
The American Academy of Otolaryngology - Head and Neck Surgery points out how national health statistics reveal that pediatric ear, nose, and throat disorders remain among the primary reasons children visit a physician, with ear infections ranking as the number one reason for an appointment. From earaches to choking hazards, kids can experience a variety of ailments that require prompt diagnosis and treatment. [Find out how to help spread the word about this observance at entnet.org/KidsENT](http://entnet.org/KidsENT)
progress that has been made throughout the years. I know he would be very proud that we are helping to further research and improve patient care and quality of life for many.”

“This professorship will allow us to focus even more on finding the causes of cleft and treating greater numbers of children,” states Deborah Kacmarynski, MD, assistant professor of otolaryngology – head and neck surgery and co-director of the Cleft Palate and Craniofacial Center.

Complications of cleft lip and cleft palate can vary greatly among affected individuals. It can include breathing, hearing, feeding, and dental problems, ear infections and hearing loss, and speech and language delays. In addition to physical complications, there are potential social and psychological challenges that a child may face. For Kacmarynski and others in the Pediatric Cleft Palate Clinic, addressing all these elements is central to the treatment children receive at UI Hospitals and Clinics.

“There is a team of people here that covers the gamut of issues and clinical problems that a child with cleft lip and palate may encounter – a team that will walk along with the family as they raise their child. We want each child to reach their full potential and for the parent of the child to maintain the dreams and hopes they had for their baby before they received the diagnosis,” states Kacmarynski.

No one knows exactly what causes clefts, and research into these causes is a major focus of Kacmarynski and her colleagues. In particular, they are focused on the inherited characteristics and genetic syndromes associated with the condition. Understanding the factors that increase the chance of having a baby with a birth defect like orofacial clefts will lead to a better understanding of the causes and possible treatments.

Research taking place at UI also inspired the Johnsons to give. “Barbara and I want the UI to be known as one of the best in the country for research and care involving cleft lip and palate. This professorship allows the university to get one of the top people in the field and will help build the program even more,” states Johnson.

The Johnsons also generously gave $500,000 to the UI Children’s Hospital Building Fund. The new 480,000-square-foot hospital scheduled for completion in spring 2016 will greatly expand care for pediatric patients from across Iowa and beyond.

“When we were considering our options for supporting the University, we had a chance to meet Dr. Kacmarynski and were impressed by how dedicated she and her team are to helping children affected by cleft. We were also excited about the new Children’s Hospital being built and wanted to help support that important area of the University,” adds Johnson.

Extending cleft and craniofacial care

In addition to the Pediatric Cleft Palate Clinic that Dr. Kacmarynski provides at UI Hospitals and Clinics in Iowa City, she and a team of specialists travel to Spencer, Iowa, twice a year. This outreach effort offers a more convenient option for families in northwest Iowa and portions of Nebraska, South Dakota, and Minnesota who seek expertise in craniofacial abnormalities. It also can lead to better outcomes and lower medical costs.

The multidisciplinary team typically includes a cleft surgeon, cleft nurse coordinator, audiologist, speech therapist, orthodontist, otolaryngology resident or pediatric otolaryngology fellow, genetic counselor, and pediatric dentistry resident. Kacmarynski collaborates with local UI alumni, Daniel Jorgensen, MD (’78MD, ’83R) of Jorgensen Hearing Center, and Brea Schmidt, DDS (’07DDS, ’09R) of Schmidt Pediatric Dentistry. Together, the group performs examinations, hearing tests, dental exams, speech therapy, and orthodontic evaluations. Complex cases are referred to UI Hospitals and Clinics for further evaluation and surgery.

Other cleft lip and cleft palate outreach initiatives include a longstanding collaboration between the Rotary Club in Iowa City and a Rotary Club in Guatemala. Kacmarynski’s predecessor and former UI professor and alumnus, John Canady, MD (’83MD, ’88R) has led a group of health care providers and medical students on medical mission trips for many years. The Johnson Professorship will allow the UI to extend outreach efforts in other underserved countries and potentially create new international partnerships in areas of the world where there is an unmet need for cleft lip and palate care.

For more information, visit uichildrens.org and search for “Cleft”.
DOD grant explores growth and potential therapies for intracranial tumors

Professor of otolaryngology and neurosurgery Marlan Hansen, MD, and his research team were awarded a three-year grant from the U.S. Department of Defense, Congressionally Directed Medical Research Program (DOD-CDMRP). Hansen’s lab explores the mechanisms that underlie the development and growth of schwannomas, a common intracranial tumor. The nearly $775,000 grant funds the project, “Contribution of p75NTR to Schwannoma Growth and Therapeutic Responses.”

Activation of the p75NTR receptor leads to the death of normal schwann cells, which are the cells that insulate nerve fibers. However, activation of p75NTR leads to a paradoxical increase in the ability of schwannoma tumor cells to grow, even in the presence of drugs that normally kill the cells. This difference makes the p75NTR receptor a potential therapeutic target to specifically inhibit the growth of schwannoma cells.

The project seeks to understand the molecular mechanisms leading to this key difference in the response of schwannoma cells to p75NTR activity compared to normal schwann cells. It also explores the possibility of enhancing the anti-tumor effects of certain drugs and radiation therapy by inhibiting p75NTR.

“Schwannomas are a common tumor in patients with neurofibromatosis type 2 and often lead to deafness, facial paralysis, hoarseness, swallowing problems, other nerve injuries, and ultimately death. There is a desperate need to identify effective therapeutic targets to prevent the growth of these tumors in patients with neurofibromatosis type 2,” says Hansen. “Our goal is to understand the basic mechanisms that lead to the growth of these tumors and to identify new drugs or therapies that will work individually or in combination with other drugs to prevent the growth of these tumors.”

Collaborators on the DOD-CDMRP grant include scientists at Indiana University, IU Health Neuroscience Center.

University announces Informatics Initiative

The Office of the Provost announced the launch of the University of Iowa Informatics Initiative with the aim of bringing together faculty and staff to conduct leading-edge informatics research and discovery. The initiative involves a partnership between researchers and teachers across campus whose work depends on the creation, evaluation, and utilization of large amounts of digital information.

Richard Smith, MD, professor of otolaryngology – head and neck surgery and Sterba Hearing Research Professor at the UI, represents the Carver College of Medicine on the initiative’s informatics task force. He co-chairs a subcommittee focused on support services for the informatics initiative.

For more information on the Iowa Informatics Initiative, check out http://informatics.uiowa.edu

UI resident receives research award

Third-year research resident in training, Dr. Xiaoyang Hua, MD, was awarded an American Academy of Otolaryngology – Head & Neck Surgery Foundation (AAO – HNSF) Resident Research Grant.

Selected by the Centralized Otolaryngology Research Effort (CORE) Study Section and sponsored by Cook Medical, the $10,000 award supports Hua’s proposal titled “Nasal Priming of Lung Innate Immunity”.

“The CORE grant provides a great opportunity to learn how to write a grant proposal and also can potentially generate preliminary data sufficient for a larger grant application in the near future. This is truly important for residents who want to pursue a career in academia after their residencies,” says Hua. “I hope to use this grant to further define the immunologic role of the human nose, especially its role in the regulation of lung and systemic immune response.”

Hua will be recognized along with other 2014 grantees at a CORE Research Awards Ceremony during the 2014 AAO – HNSF Annual Conference & OTO EXPO in Orlando.
Cycling for Hope

For Dan and Patty Burkey of Altoona, Iowa, life truly is a balancing act. In the past three years, the couple has gone from dizziness and hospital rooms to unicycling all around the state of Iowa.

In December 2011, Patty Burkey was diagnosed with Meniere’s disease, a fairly common disorder that involves vertigo, auditory issues such as ringing and pressure in the ear, and hearing loss.

“I woke up one morning and thought bugs were crawling in my ear,” says Patty. “For months, I had really severe dizzy episodes where I couldn’t stand. They lasted for days. The first time, I thought I was having a heart attack.”

What followed Patty’s diagnosis was many appointments, doctors, tests, and procedures that seemed to do little to relieve the daylong dizzy spells and bouts of nausea.

“It was a challenging time for us,” says Dan. “Patty was losing strength and losing weight. Our lives were totally controlled by the disease. We couldn’t make concrete plans because we never knew how Patty would be doing that day. We were searching for treatment that could make life livable.”

Nearly two years later, that treatment finally came when Dan and Patty connected with Marlan Hansen, MD of UI Hospitals and Clinics Department of Otolaryngology – Head and Neck Surgery.

In December 2013, Hansen performed a vestibular neurectomy, which cut the balance nerve in Patty’s ear. Since that procedure, Patty has not experienced a single dizzy spell and her other symptoms have lessened, as well.

“Since the procedure, my life is fairly normal. I plan. I do. I’m active. In a couple months, we’re going to hike to the bottom of the Grand Canyon,” Patty says with a laugh.

Today, both the cause and cure of Meniere’s remain unknown. This, combined with the care Patty received from Dr. Hansen, have inspired Dan and Patty to give back.

The Burkeys have created a fund, “Burkey’s ‘Vision of Hope’ for Meniere’s Research” through the University of Iowa Foundation. As people contribute to the study of Meniere’s disease, Dan has pledged to unicycle - an activity that requires near perfect balance - a mile in each of Iowa’s 95 state parks while Patty rides a tricycle behind him.

“The unicycling adventure began in March. The first mile involved Dan falling more than once, cutting his knee, scraping his hands, and hurting his shoulder.

“As I lay on the ground after the first fall, I really questioned what I was doing,” he says. “I was going to ride 95 miles? It was not a fun first mile.”

However, as Dan’s unicycling has improved, they have now ridden more than half of Iowa’s state parks, and their fund has continuously grown. As the fund grows, so does the impact it has on Meniere’s disease research.

To support Meniere’s disease research, visit givetoiowa.org/Burkey

Follow along with Dan and Patty on their blog - http://pedaltheparks.blogspot.com/

―Patty Burkey
Physician viewpoint: Marlan Hansen, MD

“This funding allows us to garner sufficient preliminary data which helps us secure more funding from external agencies, such as the National Institutes of Health, American Otologic Society, and others. In this way, we are able to develop new lines of investigation that we otherwise wouldn’t be able to explore. An example is a collaboration with Richard Smith’s lab to identify genetic causes for Meniere’s disease and begin to understand how these genetic alterations affect inner ear function. In addition to basic research, we also pursue clinical research in Meniere’s disease. Our ultimate goal is to offer better treatments for patients who suffer from this difficult disease.”

The University of Iowa Foundation

There are many ways to make a difference through charitable donations. To learn more about how philanthropic support helps advance the important work of the UI Department of Otolaryngology—Head and Neck Surgery, please contact:

Sean Matthys
Associate Director of Development
University of Iowa Foundation
319-467-3649
or 800-648-6973
sean-matthys@uiowa.edu

The UI acknowledges the UI Foundation as the preferred channel for private contributions that benefit all areas of the university. For more information or to make a donation, visit the UI Foundation’s secure website at givetoiowa.org/OTO
The 2014 graduates

Graduating residents and fellows pursue their next medical career moves. Where are they headed?

Graduating Residents (pictured left to right):

Jonathan Kopelovich, MD (’14R): pursue pediatric otolaryngology fellowship at Children’s Hospital of Colorado, Denver, Col.
Chuka Ifeanyi, MD (’14R): join Highland Clinic in Shreveport, La.
J. Robert Schleiffarth, MD (’14R), Chief Resident: go to Rapid City Medical Center in Rapid City, S.D.
David Gallegos, MD (’14R): join Greater Knoxville Ear Nose & Throat, Knoxville, Tenn.
Michael Reed, MD (’14R), Chief Resident: remain in Iowa City at ENT Medical Services

Fellows:

Marisa Buchakjian, MD (’14F), NIH Otolaryngology Research Fellow: remain at University of Iowa for otolaryngology residency
Kristen Hurst, MD (’13R, ’14F), Pediatric Otolaryngology Fellow: pursue position at Children’s Mercy Hospital, Kansas City, Mo.
Rick Nelson, MD (’07MD/PhD, ’12R, ’14F), Neurotology Fellow: join faculty at Indiana University of Medicine, Indianapolis, Ind.
Nicholas Potter, MD (’14F), Rhinology Fellow: pursue Head and Neck Fellowship at Princess Alexandra Hospital, Brisbane, Australia
Seiji Shibata, MD (’14F), NIH Otolaryngology Research Fellow: remain at University of Iowa for otolaryngology residency
Steven Sperry, MD (’14F), Head and Neck Cancer Fellow: join University of Iowa faculty

New colleagues

Residents:

Andrew Davis, MD: New York Medical College, Valhalla, N.Y.

Christopher Kaufman, MD: University of Texas Health Science Center at San Antonio School of Medicine

Zachary Robinett, MD: The Ohio State University College of Medicine

Eliot Shearer, MD (’14MD): University of Iowa Roy J. and Lucille A. Carver College of Medicine

Kendall Tasche, MD (’14MD): University of Iowa Roy J. and Lucille A. Carver College of Medicine

Fellows:

Brian Hughley, MD, is pursuing a Head and Neck Fellowship. Hughley completed residency and medical school training at the University of Virginia School of Medicine.

Joseph Roche, MD is here for an Otology / Neurotology Fellowship. Roche received his medical degree from the Medical College of Wisconsin in Milwaukee and completed residency training at the University of North Carolina at Chapel Hill.

Ghassan Alokby, MD joins the Rhinology Service to pursue a fellowship. Alokby completed otolaryngology training at the King Saud University in Riyadh, Saudi Arabia.

Elton Lambert, MD, is the new pediatric otolaryngology fellow. Lambert completed his residency at the University of Texas – Health Sciences Center in Houston and medical school training at the University of Rochester School of Medicine and Dentistry.

ALUMNICORNER

Receive a special award or distinction? Change your contact information lately? Let us know so we can share department news and keep in touch. Send an email with details to iowaoto@uiowa.edu

Remembrances

Denzel F. “Denny” Hartshorn, MD (’70R) of Grand Junction, CO, passed away on April 3, 2014.

Hugh A. Wiegman, MD (’60MD, ’66R) of Leawood, KS, passed away on September 25, 2013.
For many individuals, an early-life experience can often shape career choices and lead to unique professional opportunities.

For Doug Henstrom, MD, assistant professor of otolaryngology and a facial plastic surgeon, his experience came between attending college and medical school. Traveling with his father-in-law on an international mission trip, Henstrom’s eyes were opened to the different levels of health care and need for medical care around the world.

His interest in international outreach continued to grow during his fellowship training in facial, plastic, and reconstructive surgery at Massachusetts Eye and Ear Infirmary. His fellowship director encouraged Henstrom to join him on two trips to Quito, Ecuador, with the HUGS (Help Us Give Smiles) Foundation, an organization that assists children affected by microtia, cleft lip and cleft palate, and other facial deformities.

After completing fellowship training, Henstrom took a position with University of Iowa Hospitals and Clinics. He settled in to his new academic position and was soon ready to hit the international road again. In the fall of 2013 he re-joined HUGS for a mission trip to Antigua, Guatemala, a small mountain town where HUGS has established partnerships with local hospital and health care providers to provide a continuity of care for residents.

Henstrom traveled as part of a 30-member team where he treated nearly 100 patients with microtia, a congenital deformity where the pinna (external ear) is underdeveloped, and cleft lip and cleft palate. Basic health care is a luxury and surgery to correct microtia is unaffordable and overlooked. Children with the deformity face a lifetime of stigma, taunting, and emotional pain.

The trip was well organized with setup on a Saturday, assessment and pre-operative scheduling on Sunday, surgeries from Monday through Friday, and final checkout the following Saturday. Patients ranged in age and stage of care and came from around the area to receive complex care.

“It is hard work with long days. The need is great and there is always more work to do,” states Henstrom. “No one is trained to do this procedure locally and if we don’t make it happen, it

“The most rewarding aspect is seeing and experiencing the response from patients and their family members.”

—Douglas Henstrom, MD
 won’t. It really is an opportunity to do something for them that they can’t do themselves.”

The rewarding nature of the international work inspires Henstrom to consider his own circle of influence back in Iowa City. He linked another young doctor to the HUGS Foundation and their international outreach. During his last year of residency training at the UI, Jonathan Kopelovich, MD (’08MD, ’14R) traveled to Quito, Ecuador, on a HUGS mission with a team of surgeons, nurses, medical students, and other staff. The group performed over 120 microtia repairs and other procedures alongside Ecuadorian physician counterparts.

_in the future, Henstrom seeks to involve other UI surgeons on these international missions, as well as facilitate additional opportunities for Iowa’s residents interested in medical volunteer work and international outreach._

For the Antigua trip, he took one of his own sons to expose him to the same type of experience that he had years earlier. “Once they’re old enough, I’d like to take all my children with me to experience what I’ve been fortunate enough to experience,” says Henstrom.

“It was not only extremely gratifying taking care of these patients, but also helped me grow as a surgeon. I am proud to have been a part of such a world-class surgical team and am grateful to the AAO-HNSF Humanitarian Efforts Committee and HUGS Foundation for co-sponsoring my trip.”

— Jonathan Kopelovich, MD (far right)

** ”Global reach” continues from page 9**

**Loud&CLEAR FACULTY NEWS**

Gerry Funk, MD (above left), professor of otolaryngology – head and neck surgery, left the University of Iowa to pursue a private practice position. Funk has been a valuable member of the faculty and department. His contributions will be missed and we wish him the best.

Replacing Funk in the Head and Neck Cancer Clinic is Steven Sperry, MD (’14F) (above right). Sperry completed his head and neck cancer fellowship in the department and is now an assistant professor of otolaryngology – head and neck surgery.

**UI doctors chosen as Best Doctors in America**

Eight doctors and faculty from the UI Department of Otolaryngology – Head and Neck Surgery were chosen as Best Doctors in America for 2014.

Doctors are nominated by their peers with only about 5 percent of doctors in the U.S. receiving the distinction.

This year’s list includes:
- Kristi Chang, MD – Head and Neck Surgery
- Gerry Funk, MD – Head and Neck Surgery
- Bruce Gantz, MD – Head and Neck Surgery, Neurotology, Otology, Skull Base Surgery
- Scott Graham, MD – General Otolaryngology, Sinus and Nasal Surgery
- Marlan Hansen, MD – Neurotology
- Henry Hoffman, MD – Head and Neck Surgery, Laryngology
- Jose Manaligod, MD – Pediatric Otolaryngology
- Richard Smith, MD – Pediatric Otolaryngology
Loud & Clear

Events & Activities

Celebrating philanthropy

On May 1, the University of Iowa hosted the third annual “Phil’s Day” on campus. This special event celebrates “Phil” (short for philanthropy), a nickname for everyone who donates to the university, as well as all those who benefit from private philanthropic support.

Philanthropy plays a vital role in achieving our mission of patient care, research, and medical education. The Department of Otolaryngology – Head and Neck Surgery celebrated the day with posters, ribbons, and stickers throughout the clinic and laboratories.

Information about Phil’s Day on the UI campus is at uifoundation.org/Phil’sDay

Sharing the power, promise, and problems of genetic information

Director of the Iowa Institute of Human Genetics and Sterba Hearing Research Professor, Dr. Richard Smith, took the educational show on the road. He presented to an audience of community members in Des Moines earlier this spring as part of the University of Iowa Mini Medical School series. Smith shared how new technologies involving personal genetic information are shaping the future of medicine and health care.
LOUDBEACLEAR EVENTS

Mark your calendars

Sep 21-24      AAO-HNSF Annual Meeting & OTO EXPO, Orlando, Fla.
Sep 21         Iowa Alumni Reception at AAO-HNSF Meeting, Orlando, Fla.
Oct 9-11       UI Homecoming Reunion Weekend
               (Classes of ’79, ’84, ’89, ’94, and ’04), Iowa City
Nov 8          Association of American Medical Colleges (AAMC) Annual
               Meeting – Iowa Alumni Reception, Hyatt Regency Chicago
May 15-16, 2015 Functional Endoscopic Sinus Course, Iowa City
May 18-22, 2015 48th Head and Neck Cancer Reconstructive Surgery Course,
                 Iowa City
June 12-13, 2015 23rd Annual Management of the Tinnitus Patient Conference,
                 Iowa City
June 2015       Research Day, Iowa City
June 2015       Resident and Fellow Graduation, Iowa City
June 12-13, 2015 UI Carver College of Medicine Alumni Reunion
                 (Classes of ’45, ’50, ’55, ’60, ’65, ’70, and ’75), Iowa City

Updated event information with dates and details can be found at medicine.uiowa.edu/oto/courses