GASTROENTEROLOGY Turns 70

GASTROENTEROLOGY'S Editors-in-Chief: Historical and Personal Perspectives of Their Editorships

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Fourteen editors-in-chiefs have steered GASTROENTEROLOGY to success since its inception in 1943. Five (Alvarez, Ivy, Aaron, Grossman, and Donaldson) are no longer with us. Their personalities and editorships, along with those of Marvin Sleisenger, are presented by their admirers. Fordtran, Ockner, Goyal, LaRusso, Podolsky, Brenner, Rustgi, and Omary describe their own backgrounds, experiences, and personal reflections on serving as editor-in-chief of GASTROENTEROLOGY.



Walter C. Alvarez, MD (Editor-in-Chief from 1943 to 1950)

Written by John S. Fordtran Department of Internal Medicine, Baylor University Medical Center, Dallas, Texas Photo courtesy of Stanford Medical History Center¹

Walter C. Alvarez was born in San Francisco in 1884. He received his medical degree from Cooper Medical College

(a proprietary school), which later became the medical department of Stanford University. Thereafter, he always considered himself to be "in practice." He said he did not retire from the practice of medicine until 1975, when he was 91 years old.

Alvarez trained as a physiologist with Walter B. Cannon at Harvard University; while working in Cannon's laboratory, he discovered the concept of physiological gradients along the length of the intestinal tract. He continued his research on intestinal physiology in San Francisco, using a laboratory provided to him by George H. Whipple.

Alvarez believed he learned medicine best from his patients. He kept track of many, if not most, of his patients by using notebooks, which were always with him. He also kept a diary. From his patients he became interested in what is now called "psychosomatic medicine." He was a strong advocate of treating the patient as well as the disease.

In 1934, Alvarez moved to Rochester, Minnesota, to become part of the Mayo Clinic and the Mayo Foundation. While there, he practiced medicine and was part of the Rowntree research group (Graner JL, Mayo Clin Proc, 2005), which included Philip Hench. Alvarez became close friends with Will and Charles Mayo. Even though he remained at the Mayo Clinic for 30 years, he never felt that he fit in.

In 1963, when he was 79 years old, Alvarez wrote his autobiography, *The Incurable Physician* (Alvarez WC, Incurable Physician, An Autobiography, 1963). In 1977, when he was 93 years old, he updated his autobiography by writing *Alvarez on Alvarez* (Alvarez WC, Alvarez on Alvarez, 1977). His main pleasure was reading, but he also found happiness in trying to improve science and medicine. As he became older, he had no interest in the hundreds of papers he had published, but instead remained anxious and excited to begin work on new papers and books.

In 1938, the AGA established an affiliation with the American Journal of Digestive Diseases and Nutrition, and Alvarez was selected from the AGA membership to become the editor. Then, when Gastroenterology was launched in 1943, Alvarez became its first editor. Thus, for a total of 12 years (5 with American Journal of Digestive Diseases and Nutrition and 7 with Gastroenterology), Alvarez was editor-in-chief of the official publication of the AGA.

Volume 1 of GASTROENTEROLOGY contained 12 monthly issues. The front cover of the January issue contained a picture of the AGA's highest honor, the Julius Friedenwald Medal, and a statement dedicating this first issue to William Beaumont. For several years, the July issue was similarly dedicated to that year's winner of the Frieden-

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wald Medal, including Anton Julius Carlson in 1944, Lewis Gregory Cole in 1945, and Frank Howard Lahey in 1946. Starting in 1948, the front cover of each issue showed a list of the articles included in that issue.

The first paper of the first issue was titled "Prepyloric Lesions of the Stomach" and was written by Sara M. Jordan and Frank H. Lahey (Jordan SM et al, Gastroenterology, 1943). Other papers in the first issue were written by A. J. Carlson, B. B. Crohn, R. Schindler, E. B. Benedict, W. C. Alvarez, and Joseph Kirsner. There were 11 original articles in the first issue, all written by stars in the field of gastroenterology at that time.

The first issue also had 5 editorials and a remarkable section edited by Franklin Hollander, Abstracts of Current Literature, which summarized 38 papers published in other journals. Other sections included editorials and book reviews, which were all prominent features while Alvarez was editor-in-chief. In one of the early issues, the first edition of the textbook *Bockus Gastroenterology* was reviewed.

Other issues published during the first few years were equally interesting and exciting. Acid secretion, peptic ulcers, psychosomatic medicine, and obesity were frequently studied and discussed. There were substantial discussions about World War II, which took place while Alvarez was editor-in-chief. Burrill Crohn wrote an editorial on "Inequities of the Selective Service" (Crohn BB, Gastroenterology, 1943). Sara Jordan wrote an editorial that proposed checking soldiers for achlorhydria, which would put them at increased risk for bacterial overgrowth and gastrointestinal infections in the tropics. The front cover of the January 1945 issue stated, "In cooperation with the war committee on conventions, the annual meeting of the association for June 1945 has been cancelled."

The life of Walter Alvarez was so full that *Incurable Physician* contained only 2 paragraphs (of 275 pages)

about his editorial work for Gastroenterology. From 1934 to 1950, he wrote 329 editorials for *American Journal of Digestive Diseases and Nutrition* and Gastroenterology. In the issue that announced his retirement as editor-inchief of Gastroenterology (January 1951), Alvarez wrote 5 editorials: "Gastric Cancer after Gastro-Enterostomy," "A Review of Gastroenterology," "Carcinoma and Ulcerative Colitis," "Vagotomy and the Mann-Williamson Ulcer," and "The New Treatment for Megacolon." In the editorial on carcinoma and ulcerative colitis, his final sentence was as follows: "Let us say again, the main point of interest in this type of cancer is not the percentage incidence; the startling features are the youth of so many of the patients, and the sudden wildfire type of growth of cancer all over the ulcerated colon."

Nothing in clinical gastroenterology or clinical science was beyond his interest. Mateer said that few men in modern medicine have had the intellectual capacity and energy of Walter Alvarez (Mateer JG, Gastroenterology, 1951). His desire to disseminate new knowledge unselfishly was truly remarkable and possibly unparalleled. He decided not to continue as editor-in-chief only because he was invited to be the editor of the official journal of the American Academy of General Practice.

Alvarez was a master of self-expression. With little apparent effort, he could write an essay that was concise, charming, and insightful. The excitement and energy of Gastroenterology were greater under Alvarez than under any subsequent editor. Had I been a clinical investigator in that era, Gastroenterology would have been my preferred place to publish a paper. Nothing would have been as exciting as having Walter Alvarez write an editorial on something I had done. Walter C. Alvarez was, to me, the father of Gastroenterology.



Andrew Convay Ivy, MD (Editor-in-Chief from 1950 to 1952)

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Photo courtesy of the American Physiological Society²

Andrew C. Ivy was never officially appointed editor-in-chief of GASTROENTER-

OLOGY; his official title was managing editor. During that time, editorial duties were performed by a committee headed by Walter Palmer (Oral History, Boles-Palmer).

Ivy grew up in Cape Girardeau, Missouri. His father was a science professor, and his mother was a teacher. Ivy trained in medicine and physiology in Chicago, taught at Northwestern University, and was mentored by A. J. Carl-

son. He later became vice president of the University of Illinois, a position that he held until 1953. His life was filled with unprecedented accomplishments as well as controversy.

Ivy was often characterized as having "too many irons in too many fires." He played many sports, the violin, and the helicon bass; he was on the debate team; and he sang (as a second tenor). Throughout his long career, he often held several major positions simultaneously. Between

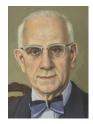
1919 and 1955, Ivy and coworkers published more than 1500 papers and Ivy authored more than 12 books. The Science Citation Index shows that from 1964 to 1971, Ivy's articles were cited more often than those of any other scientist in the world. His work covered almost every aspect of gastrointestinal physiology as well as cancer research.

Some of his approaches and findings are now regarded as classic. Examples include using subcutaneously transplanted organs to show that humoral mechanisms regulate gastric and pancreatic secretion, discovering the hormone cholecystokinin and the polypeptide urogastrone, and elucidating the effects of total gastrectomy in animals. Few know that Ivy had deep and continuing interests in areas outside gastroenterology, such as the physiology of the uterus during labor, experimental intersexuality, aviation medicine, artificial respiration, cardiac pain, the preparation of fresh water from seawater, protection from flash burns, and treatment of typhoid carriers. He also introduced the Ivy bleeding time, a method still used to identify patients with clotting abnormalities. Peptic Ulcer, which he published in 1951 with Morton Grossman and William Bachrach, is an internationally recognized textbook (Ivy AC et al, Peptic Ulcer, 1951).

Ivy served as president of the American Physiological Society (1939-1941) and was president of the AGA in 1940. He had a key role in the creation of GASTROENTEROLOGY. In 1941, he was selected to represent the AGA to negotiate an agreement with Beaumont Connell, owner of the American Journal of Digestive Diseases and Nutrition. However, no agreement could be reached, and on June 15, 1942, the AGA notified Connell of the termination of the publishing agreement. Ivy also had a role in the extensive negotiation between the AGA and the publisher Williams and Wilkins. He was a major proponent of the new journal and had correctly predicted that it could be a financial success that was self-sustaining and not a burden for the AGA. He was also instrumental in recruiting authors to provide papers for the entire first volume before the first issue was published in January 1943.

By the end of World War II, Ivy was probably the most famous physician in the country. However, his exceptional career was tarnished by 2 unfortunate events. He was the principal author of the Green Report regarding the ethics of testing a vaccine for malaria on inmates at Stateville Prison in Joliet, Illinois, in the 1940s. He was appointed by the American Medical Association as its representative at the 1946 Nuremberg Medical Trials for Nazi physicians and was accused of misleading the trial regarding the Green Report to influence its outcome (Weindling P, Bulletin of the History of Medicine, 2001).

Ivy was also involved in an infamous pharmaceutical venture. Ivy was deeply committed to his hypothesis that the body secretes chemicals that fight cancer. Around that time, a South American physician, Steven Durovic, claimed he had extracted a chemical from horse serum inoculated with Actinomyces bovis that was useful in the treatment of cancer in cats and dogs. He called it Krebiozen (kre = cancer, biozen = biologic; also known by the names Carcalon, substance x, or drug x). Ivy was impressed. He administered the substance to himself and his colleagues to establish its safety. He then started testing it in patients with cancer. In 1951, Ivy announced at a press conference that Krebiozen was an excellent anticancer drug. He reported that he had used Krebiozen to treat 22 patients with cancer and that 14 remained alive and none had died of cancer. Durovic and his brothers established the Krebiozen Research Foundation, with Ivy as president. However, in 1951, an article published in the Journal of the American Medical Association did not support claims that Krebiozen was effective against cancer (A Report of the Council on Pharmacy and Chemistry, JAMA, 1951). Investigation and chemical analysis of Krebiozen revealed it to be only mineral oil, with or without creatine. In 1964, the Krebiozen Research Foundation and its principals were indicted and then acquitted by a hung jury. Durovic was indicted for tax evasion and fled the United States. Ivy was not found to be involved in financial wrongdoing, but he stepped down as vice president of the University of Illinois. He also resigned from the position of managing editor of GASTROENTEROLOGY in 1953. Except for these unfortunate happenings, Ivy had great influence in initiating and nurturing the AGA and GASTROENTEROLOGY. He was awarded the Julius Friedenwald Medal in 1970.



Abraham H. Aaron, MD (Editor-in-Chief from 1953 to 1959)

Written by Raj K. Goyal

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Illustration courtesy of University at Buffalo Libraries

Born in 1890 in Buffalo, New York, Abraham H. Aaron graduated from the University of Buffalo School of Medicine in 1912, where he also underwent his postgraduate training. From 1912

to 1918, he was an apprentice to his uncle, Charles D. Aaron, who is considered the founder of the AGA. He entered into his own practice in 1918 in Buffalo, where he founded the Post-Graduate Medicine Department in 1921. Aaron served at Buffalo General Hospital as an attending physician from 1918 to 1944, a rotating chief of medicine until 1956, and president of the medical staff in 1945, as well as a past president of the Erie County Medical Society, the Buffalo Academy of Medicine, and the alumni association of the medical school. He also authored or coauthored more than 50 medical articles.

A bachelor, Aaron was "Uncle Abe" to his students and young colleagues (Jordan SM, Gastroenterology, 1958). He served as an officer for many local and national societies and was interested in medical economics. He was known for his bedside teaching and mentorship. Aaron is remembered not only for a signature red carnation on his lapel, but for his compassion, intelligence, and leadership in the field of gastroenterology.

Aaron was a committee man and worked particularly well with people. At the AGA, he served as treasurer for 8 years and president from 1944 to 1945. In the 1950s, the ethics of publishing, particularly publishing advertisements in scientific journals, became a big issue. At that time, the AGA Governing Board appointed Aaron to serve as chair of an informal advertisement council. The council evaluated the pharmacological safety and clinical

utility of materials advertised in GASTROENTEROLOGY. He instituted an evaluation process that included sending advertising copy to clinicians and collecting their opinions about the actual safety and efficacy of the advertised products. To no surprise, the advertising claims frequently did not meet the vigorous standards of the reviewer. Advertisers were asked to revise their claims and document the accuracy of their conclusions. Advertisers were also asked to provide references to scientific literature. This practice continues today.

Aaron became managing editor of GASTROENTEROLOGY when Ivy resigned in 1953 and served with the editorial committee chaired by Walter Palmer. A few years later, he also assumed the position of editor-in-chief. At that time, findings published in GASTROENTEROLOGY were those presented at the AGA meeting, which were first submitted to the editor-in-chief for consideration. Most of the other articles came from the clinical services of AGA members. Aaron invited clinical papers focusing on ethical and conflict-of-interest issues. In his presidential address, delivered at the end of World War II, he discussed the functions of the board of editors and council of GASTROENTEROLOGY and the high standards of acceptance of advertising materials (Aaron AH, Gastroenterology, 1958). He received the Julius Friedenwald Medal in 1958 (Jordan SM, Gastroenterology, 1958).



Morton I. Grossman, MD, PhD (Editor-in-Chief from 1959 to 1965)

Written by Mark Feldman and Andrew H. Soll
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Photo courtesy of The American Physiological Society³

Morton I. Grossman, MD, PhD, was the fourth editor-in-chief of Gastroenterology. However, Grossman was already on board when the Journal was founded in 1943, working closely with his mentor, Andrew C. Ivy, and the first editor-in-chief, Walter C. Alvarez. Grossman's early role at the new journal was, in his own words, dealing with "... the mechanics and flow of manuscripts-sending them out for review, letters, decisions-I took care of all that from the first year" (Boyle JD, Gastroenterology, 1982). This experience undoubtedly prepared Grossman for his later role as editorin-chief. According to Grossman's oral history, in the late 1950s he prepared a critique for the editorial board comparing Gastroenterology "...with other substandard journals, and expressed the opinion that we would need a very far turn with our methods, goals, and procedures. Before I knew it, I was editor of GASTROENTEROL-

ogy. And I don't think I did anything particularly revolutionary. I was simply aware of what journals of high standards were doing and adopted those same principles," such as including at least 2 outside reviewers in the review process (Boyle JD, Gastroenterology, 1982).

Grossman went on to say that during his tenure, GASTROENTEROLOGY "moved from somewhat of a club news bulletin to a journal representing a major subspecialty." According to Charles F. Code, Grossman was "what our journal needed when he became its Editor. He did more than anyone else to make GASTROENTEROLOGY a great journal" (Code CF, Gastroenterology, 1982). One of the first articles published after Grossman became editor-inchief was written by Grossman himself on the pyloric gland region of the stomach (Grossman MI, Gastroenterology, 1960), followed by an equally important paper on the role of the gastric antrum in gastric acid secretion

(Woodward ER, Gastroenterology, 1960). During Grossman's tenure as editor-in-chief, Horace W. Davenport, a distinguished gastrointestinal physiologist, published a study on gastric mucosal damage by aspirin, which was the Journal's most-cited publication for that 5-year period (Davenport HW, Gastroenterology, 1964).

Grossman imposed the 5-year term limit for editors because, in his view, "... there aren't dynasties and ... there is so much talent that should be used, and also since the very process of change has some value..." (Boyle JD, Gastroenterology, 1982).

Grossman's highly distinguished academic background has been chronicled extensively in Gastroenter-OLOGY and elsewhere (Guth PG et al, Am J Physiol Gastrointest Liver Physiol, 2008). Soon after his death in 1981, Gastroenterology dedicated 50 pages to honor and memorialize his career and contributions to gastroenterology (Gastroenterology, 1982).

John Walsh and Jon Isenberg referred to GASTROENTER-OLOGY as "Grossman's baby" and reminisced that Grossman "... felt that GASTROENTEROLOGY should contain the best of both basic and clinical research in hepatology and gastroenterology" (Walsh JH et al, Gastroenterology, 1982).

Some personal anecdotes: I (M.F.) published a paper in Gastroenterology in the late 1970s while Grossman was on the editorial board. One day, a handwritten note

arrived from Grossman in the mail saying he liked the study very much but "like any good research, it raised more questions than it answered," after which he listed numerous questions that needed answering. Never before (or since) had anyone told me my work was incomplete in a more professional, motivating way.

My (A.H.S.) first experience with Grossman as an editor was submitting my own work to him as my mentor. My first paper was returned with a single comment, "needs work," and a copy of Strunk and White's *The Elements of Style*. Subsequently, I was continually amazed by the deftness of his pencil, transforming long, awkward phrases into telegraphic morsels transmitting crystal-clear thinking and then handing off the baton, hoping we could hold on to it.

If Grossman were alive today, he would be in his 90s. He would be pleased with Gastroenterology yet would point out on a regular basis, in his unique and kind style, how the Journal could be better. Code said that Grossman's "perfectionism in the use of language, his native intelligence, and his extraordinary memory made him one of the great medical editors of our time" (Code CF, Gastroenterology, 1982). What more can we say about this marvelous man and remarkable mentor who changed Gastroenterology and our subspecialty forever and nurtured the careers of so many investigators?



Marvin H. Sleisenger, MD (Editor-in-Chief from 1965 to 1970)

Written by Raj K. Goyal Department of Internal Medicine, VA Boston Healthcare System and Harvard Medical School, Boston, Massachusetts

The fifth editor of GASTROENTEROL-OGY was born in Pittsburgh in 1924 and graduated from Harvard Medical

School in 1947. He received training in gastroenterology at the University of Pennsylvania Hospital and New York Hospital. He was appointed to the board of editors of Gastroenterology in 1963 and became assistant editor in 1964 and editor-in-chief in 1965. Sleisenger is internationally renowned for his work in internal medicine and the subspecialty of gastroenterology. He has made valuable contributions to the University of California at San Francisco (UCSF) and the San Francisco Veterans Affairs Medical Center (SFVAMC) during his long career in the Bay Area.

At Cornell University, Sleisenger rapidly rose to the rank of professor of medicine and then to director of one of the nation's premier specialty divisions of gastroenterology. In 1968, Sleisenger was recruited to UCSF as chief of the medical service at the SFVAMC and vice-chair of

UCSF's Department of Medicine. In subsequent years, due in large measure to his imaginative and sustained leadership, the SFVAMC became the most acclaimed of the 155 hospitals in the national VA system. This transformation was based on balanced, excellent programs in patient care, education, and medical research.

Sleisenger stated that the reports published in GASTROENTEROLOGY from 1965 to 1970 contributed to a transition in gastroenterology research in a number of important areas, particularly in increasing our understanding of the basic physiology and biochemistry of gastric secretion, immunology and diagnosis of celiac disease and of the genetic predisposition to colorectal cancer. The pace of gastroenterology research accelerated in succeeding decades; GASTROENTEROLOGY caught the wind that was blowing research ever deeper into scientific inquiry, away from a past of predominantly empirical observations.

A momentous event during Sleisenger's tenure was the isolation of the hormone gastrin by Rod Gregory and

Hilda Tracy in 1962 (Gregory RA et al, Gastroenterology, 1966) and the demonstration that the terminal peptide produced the same effects as the total peptide. These formed the basis for knowledge about normal and abnormal acid secretion. Before these reports, histamine was believed to be the key regulator of gastric acid secretion. However, its physiological relevance had been difficult to prove. Isolation and synthesis of gastrin led to its accurate measurement in plasma and serum using radioactively labeled antibodies (Yalow RS et al, Gastroenterology, 1970).

One of the breakthroughs in the discovery of genetic factors that contribute to colorectal cancer came from clinical and pedigree analysis of family cancer syndrome—families with a high incidence of multiple organ

cancers, particularly of the colon and endometrium (Lynch HT et al, Gastroenterology, 1967). These investigators proposed that the colon cancers that developed in these families probably did not arise from polyps, that the hereditary (genetic) defect was transmitted in a dominant fashion, and that this defect differed from other polyposis syndromes. These observations motivated the creation of the National Polyp Study, which found that the incidence of colorectal cancer among patients whose adenomas had been cleared by colonoscopy was reduced by 90% compared with reference populations. This observation led to widespread colonoscopy screening and surveillance programs, along with further studies into the genetic and epigenetic alterations that lead to malignant transformation of normal mucosa.



Robert M. Donaldson Jr, MD (Editor-in-Chief from 1970 to 1977)

Written by Jerry S. Trier
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Robert M. Donaldson Jr was wisely chosen in 1970 to be the editor-in-chief of Gastroenterology, following a de-

cade of growth of the Journal under Morton Grossman and Marvin Sleisenger. Donaldson was exceptionally well qualified to lead GASTROENTEROLOGY into its next phase of development.

Donaldson was a Massachusetts native and the archetypal New Englander. In the 18 years that followed his graduation from Boston University Medical School, he established his reputation as an astute and perceptive clinician, a creative clinical and basic investigator, a stimulating educator, and a selfless and efficient administrator, first at the University of Wisconsin School of Medicine, where he directed the National Institutes of Health (NIH)-sponsored Clinical Research Center, and subsequently at Boston University School of Medicine, where he directed the Gastroenterology Section of the Department of Medicine. Editorial skills had come naturally and early to Donaldson, who served as editor of his high school newspaper. At Marvin Sleisenger's suggestion, Donaldson established the Selected Summaries section of Gastroenterology in 1965 and edited the section for the next 5 years. Today, Selected Summaries continue in the same format developed by Donaldson 47 years ago.

During his term as editor-in-chief of GASTROENTEROLOGY, Donaldson moved from Boston University to Yale University, his undergraduate alma mater, to be chief of medicine at West Haven Veterans Administration Hospital and vice chairman of the Department of Medicine. Donaldson then served in a number of major administrative roles at Yale

University School of Medicine, including that of deputy dean and acting dean. Two years after completing his term as editor-in-chief of GASTROENTEROLOGY, Donaldson served as president of the AGA. He was chairman of the editorial board of GASTROENTEROLOGY from 1983 to 1988, and he was awarded the Julius Friedenwald Medal in 1987. He continued making contributions to the medical literature, the digestive diseases community, and Yale University Medical School. As a testament to his selflessness, he provided primary care to patients with acquired immunodeficiency syndrome in New Haven until shortly before his death in 2003 at the age of 75 years.

In Donaldson's 7 years as editor-in-chief at GASTROEN-TEROLOGY, the Journal became bigger and busier. The number of submitted manuscripts more than doubled, as did paid subscriptions. Whereas almost 50% of submitted manuscripts were accepted for publication in 1970, only 28% were accepted in 1976 (Donaldson RM, Gastroenterology, 1977) because of space constraints and an effort to increase the quality of published papers. Nonetheless, the number of accepted original reports increased by approximately 50%. To accommodate this, the page size of the Journal increased by 60% in 1976, and more than 1000 additional pages were published in 1977 compared with 1970.

The editors began grouping articles in separate sections by subject matter under headings that included "Alimentary Tract" and "Liver Physiology and Disease." Although only a limited number of original clinical studies met the strict editorial standards for publication in the Journal, invited papers of interest (from practicing

clinicians) were published in the Clinical Trends and Topics section of GASTROENTEROLOGY. A Rapid Communications section was added in 1975 to allow publication of short (no more than 4 journal pages) important papers within 30 to 60 days of acceptance; authors were promised an editorial decision within 3 weeks of manuscript receipt.

During the 1960s and 1970s, important improvements to endoscopy techniques and instruments facilitated the collection of biopsy specimens from previously inaccessible sites of the alimentary tract. Additionally, powerful research tools such as electron microscopy, radioautography, and immunocytochemistry became available for morphology studies. Studies that used these methods required high-quality illustrations to present the data. To attract articles from cell biologists, experimental pathologists, and clinical scientists who used these techniques, the Journal made an effort to publish high-fidelity photomicrographs and electron micrographs similar in qual-

ity to those published in pathology and cell biology journals. This was accomplished by printing the Journal on higher-quality paper and using high-resolution engravings for half-tone illustrations. Cooperation from the publisher, Williams and Wilkins, and its president, the late Charles Reville, greatly facilitated this effort. According to Donaldson, Gastroenterology did not incur a financial deficit during his term as editor-in-chief (Donaldson RM, Gastroenterology, 1977) despite increased publication costs, an unchanged subscription rate, and the lack of submission fees or page charges.

Importantly, papers published in Gastroenterology were widely read during Donaldson's time as editor-inchief. As he mentioned in his valedictory editorial, of the 2400 scientific journals published in 1974, Gastroenterology ranked a striking 11th in impact factor (calculated as the number of its articles cited in scientific journals per the number of articles published in Gastroenterology), just behind *Science* (Garfield E, Nature, 1976).



John S. Fordtran, MD (Editor-in-Chief from 1977 to 1981)

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I was born in San Antonio, Texas, in 1931 and was raised on a dairy farm 7 miles from the town of Stockdale in Wilson County. I attended the University of Texas (UT) for 3 years (no de-

gree), went to medical school at Tulane University, and was a resident in internal medicine for 2 years at Parkland Hospital in Dallas. After that I joined the US Public Health Service, spent about 8 months at the NIH in Bethesda, Maryland, and then transferred to the Navajo Medical Center in Fort Defiance, Arizona. After 2 years in the US Public Health Service, I began a 2-year fellowship in gastroenterology in Boston with Franz Ingelfinger and then joined the faculty at UT Southwestern Medical School in Dallas, working under Don Seldin. I remained at UT Southwestern until 1979, when I moved to Baylor University Medical Center in Dallas, where I am still employed. In 1976, Morton Grossman asked me to become editor-in-chief of GASTROENTEROLOGY, which I considered to be a huge honor.

While I was editor-in-chief, all but one of the other members of the editorial team were members of our gastrointestinal and liver disease faculty in Dallas. Burton Combes was the editor of all papers on liver disease; associate editors included Guenter Krejs, who handled manuscripts on intestinal disease, and Athol Ware, who handled papers on liver disease. Raj Goyal was in charge of manuscripts related to motility, and John Walsh (from Los Angeles) handled manuscripts

dealing with gastrointestinal hormones. Jon Isenberg edited the Selected Summaries section, Armand Littman was the book review editor, and Marvin Schuster was the audiovisual editor. Fred Kern was chairman of the editorial board.

We had one editorial assistant, and delinquent reviewers were sent reminders on picture postcards of the Alamo, a Texas Jack Rabbit, a Longhorn Steer, Texas Bluebonnets, and so on. We used no computers, but we frequently spoke with authors on the telephone. The Dallas editors met for approximately 3 hours each week to discuss each paper that was submitted and reviewers' comments. Our aim was to understand the message of each paper and assess the validity of the evidence to support the conclusions. We did not make decisions by averaging the ranks of the reviewers. In our decision letters to authors, we tried to explain in our own words how we had reached our decision. We avoided form letters and often worked with authors over several submissions to try to improve papers so they could be accepted for publication.

We strongly believed that GASTROENTEROLOGY should publish clinical and research findings in approximately equal proportions. To increase the clinical relevance of the Journal, we added clinical pathology conferences and increased the number of articles on pathophysiology. To ensure that clinicians understood research findings, we published editorials to explain their general significance; at least one respected researcher considered this to be a

mistake, "like the Edsel" (Graham DY, Gastroenterology, 1978).

We published 14 historical profiles, which we thought added important perspectives. Highlights included "Tubes" by Franz Ingelfinger (Ingelfinger FJ, Gastroenterology, 1978) and a "Personal History of the Fiberscope" by Basil Hirschowitz (Hirschowitz BI, Gastroenterology, 1979). In 1979, we reprinted Samuel Meltzer's 1904 presidential address (Meltzer SJ, Gastroenterology, 1979), delivered only 7 years after the AGA was formed in 1897. It was originally published in Transactions of the AGA (Meltzer SJ, Transactions of the American Gastroenterological Association, 1904), which therefore was the first medical journal associated with the AGA. Meltzer said that in 1904 there were only 29 active members of the AGA, which was 25% less than the membership peak of 39 members. Meltzer thought the declining membership was mainly caused by public distrust of "stomach specialists" and that such physicians should have their AGA membership revoked. He said that our association should be based on science and high ideals. He also recommended that when the time was right, the AGA should start an American journal for gastroenterology, under the careful editorial management of the association.

Following tradition, Fred Kern's AGA presidential address in 1976 was published in GASTROENTEROLOGY. The title of the address was "Good News and Bad News" (Kern F Jr, Gastroenterology, 1976). Part of the good news was that new endoscopic instruments had improved patient care and these glamorous tools allowed gastroenterologists to face cardiologists with pride. Part of the bad news was that, in his opinion, endoscopic studies had not increased our understanding of disease, endoscopy was overused, the high cost of endoscopic procedures would jeopardize our intellectual integrity and our professional freedom, and emphasis on endoscopy in training programs would not allow enough time for trainees to learn to be consultants. The address and its publication included a picture of an endless chain of people performing colonoscopies on each other, end to end, like elephants in a circus. Kern thought that routine endoscopy procedures should be performed by technicians, similar to the way technicians, rather than nephrologists, performed dialysis.

Kern's ideas did not sit well with Angelo Dagradi from California, who made a point-by-point rebuttal in a letter to the editor (Dagradi AE, Gastroenterology, 1977). He stated that development of endoscopic skills is time consuming, not all gastroenterologists are capable of developing such skills, and it is reasonable that society pay handsomely for a well-performed procedure. He thought that Kern had ridiculed endoscopy and endoscopists by his "visual hallucination" and by designating gastrointestinal endoscopists as technicians.

Kern replied, "The gentleman doth protest too much, methinks" (Kern F Jr, Gastroenterology, 1977). This reply was resented by Stephen Hedberg from Boston, who felt that Dagradi's opinions deserved serious discussion; Hedberg said, "The devil can quote scripture, and anyone can quote Shakespeare" (Hedberg SE, Gastroenterology, 1977). Several long editorials followed, and neither side gave much ground (Kern F Jr, Gastroenterology, 1979; Fordtran JS, Gastroenterology, 1979; Kern F Jr, Gastroenterology, 1980; Panish JF et al, Gastroenterology, 1980; Nern F Jr, Gastroenterology, 1980; Panish JF et al, Gastroenterology, 1980).

One of the last opinions came from a gastroenterology fellow in Milwaukee, David R. Riedel (Riedel DR, Gastroenterology, 1980). He pointed out that many faculty members at his institution were actively competing for procedures, indicating that most physicians who call themselves gastroenterologists feel the need to develop endoscopic expertise. He acknowledged that the pressure to "get the procedures done" had definitely diminished his potential role as a consultant as well as his time for reading.

In the ensuing 35 years, increasing emphasis has been devoted to endoscopic procedures over consultation skills, and technicians have not replaced gastroenterologists in the performance of routine endoscopy. It will be interesting to see where this stands after another 35 years have passed, when cost containment will probably have markedly reduced reimbursement rates for procedures and fee-for-service is only a distant memory.

When I accepted Grossman's offer to become editorin-chief, some of my friends told me I had made a mistake, the job was a thankless task, I would be personally attacked by rejected authors, and it was an academic dead end because it would interfere with my own research. As it turned out, I did not receive any personal attacks, but occasionally a rejected author was quite upset with the reviews of his or her paper. One of these wrote the following: "The opposition to the enclosed by reviewing bodies has been of such unexpected vehemence that I am convinced the ideas therein must have much greater merit than originally imagined. It has been considered combative. This was not intended; but, if it is perceived as such, I hope the intellectual Gulag of moribund isolated cells, imaginary receptors, unemployed hormones and a la mode Physiologists is recognized as its

I did not find being editor-in-chief of GASTROENTEROLOGY to be a thankless task, and I always thought that I was well rewarded for the work that I put into the job. I think the stipend was about \$6000 per year, which was a helpful addition to my income. Other tangible rewards were the 37 letters of thanks I received when our term ended.

I still have these letters. One said that we had paid great attention to big and small details of GASTROENTEROLOGY in all its aspects. Another said that our decisions appeared to be always based on a thoughtful assessment of the arguments presented rather than merely assuming that the reviewers were invariably right and the authors invariably wrong. This is what we deliberately set out to

do, and it is gratifying that the authors and reviewers appreciated our efforts. Finally, I have many good friends who I met and know only through correspondence related to submitted manuscripts. Being editor-in-chief probably detracted a little from my own research, but there were many more positive than negative aspects of the position.



Robert K. Ockner, MD (Editor-in-Chief from 1981 to 1986)

Department of Medicine and Liver Center, University of California, San Francisco Medical Center, San Francisco, California

I was born in 1936 in New Kensington, Pennsylvania, moved to Los Angeles in the mid-1940s, and graduated from Los Angeles High School (1953)

and Pomona College (BA in 1957). I received my medical degree from Harvard Medical School (1961), where a critically formative student summer research fellowship with Rudi Schmid followed my 3rd year. My internship and residency in medicine were on the II and IV (Harvard) Medical Services of Boston City Hospital (1961–1966, 1965–1966). I served as clinical associate at the National Institute of Arthritis and Metabolic Diseases in Bethesda, Maryland (1963–1965) and, after the final year of residency, served as a fellow in gastroenterology at Massachusetts General Hospital with Kurt J. Isselbacher (1966–1968).

I was recruited by Rudi Schmid in 1968 to join the Division of Gastroenterology at UCSF, and I served as assistant professor through professor of medicine from 1968 to 2004. At UCSF, I conducted NIH-funded research on fatty acid metabolism and the fatty acid binding protein family from 1969 to 1996. I also served as chief of clinical gastroenterology at Moffitt Hospital (1970-1982), director of the Division of Gastroenterology at UCSF (1982-1990), director of the UCSF Liver Center (1983-1998), president of the American Association for the Study of Liver Diseases (1983-1984), and coeditor with Jim Boyer of 6 annual editions of "Progress in Liver Disease." After completion of an analytical review of relevant literature and some related experiments, I published a monograph titled "Integration of Metabolism, Energetics, and Signal Transduction: Unifying Foundations in Cell Growth and Death, Cancer, Atherosclerosis, and Alzheimer Disease" (Ockner RK, 2004). I retired as professor of medicine emeritus in 2004.

In a brief review of the titles of the articles published in Gastroenterology during my editorship, virtually all areas of digestive and liver disease appear to have been represented, although I did not conduct a detailed tabulation. Before and during this formative

period, GASTROENTEROLOGY was the major vehicle for communication of advances in all aspects of digestive science and disease. However, changes were occurring throughout digestive diseases (for example, see Greenberger N, Gastroenterology, 1985) and in all of medical science. As a result, an increasing number of articles submitted for publication became important stimuli to a proliferation of biomedical journals in virtually all fields.

Hepatology was launched during this period by the American Association for the Study of Liver Diseases and began its important and successful role in the field of hepatobiliary disease. This reflected, in part, acceptance of the concept that liver transplantation was no longer experimental; the number of transplant centers increased, along with basic and clinical research in hepatology. Throughout this rapid evolution, however, GAS-TROENTEROLOGY continued to publish important papers on all aspects of digestive and hepatobiliary disease. For example, in the first full year of my editorship, 374 articles were published in GASTROENTEROLOGY, of which 118 (32%) were hepatobiliary; in the final year of my editorship, the respective numbers were 443 and 126 (28%). In contrast, approximately 420 articles were published in GASTROENTEROLOGY in a recent 6-month period; of these, 96 (22.4%) could be classified as hepatobiliary, and few were related to liver transplant. Although it is impossible to interpret these numbers without knowledge of the number and quality of manuscripts submitted, they indicate a sustained and broad role for GASTRO-ENTEROLOGY in the communication of research in digestive and hepatobiliary diseases, with some quantitative decrease in the latter category.

Even though my term as editor-in-chief of GASTROEN-TEROLOGY ended 26 years ago, it is with a continuing sense of gratitude and humility that I reflect on that period. The appointment was a great honor and carried with it an implied trust that one can only hope was fulfilled. It was also a great challenge and opportunity to be a part of a rapidly changing scene that engulfed not only digestive diseases but also the whole of med-

icine and medical science. My comments on the occasion of the Journal's 65th birthday appear with those of the others so privileged (Ockner RK, Gastroenterology, 2008).

A particularly gratifying aspect of my editorship was the opportunity it provided to interact with my fellow editors: the late Rudi Schmid and Marvin Sleisenger (UCSF), Raj Goyal (at that time at Baylor College of Medicine), Young Kim (UCSF), Bruce Scharschmidt (UCSF), and the late John Walsh (University of California Los Angeles). One could not have asked for a more intelligent, knowledgeable, discerning, hardworking, cooperative, and good-natured group. Whatever success Gastroenterology might have achieved during that period was certainly the result of that group's efforts and tireless devotion to the seemingly endless flow of manuscripts, revisions, and concerns of not-always-happy authors. My already great esteem

and affection for them as friends and colleagues increased tremendously as a result of our Friday editorial meetings, at which we took turns presenting manuscripts under consideration in a manner that did justice to the author, to the Journal, and, above all, to the state of science in the field(s) under consideration. Raj Goyal and John Walsh were able to join the San Francisco group from time to time.

Given the unpredictable nature of science and scientific discovery, it seems likely that we have not seen the end of important changes in either our field or our Journal. It is an honor and pleasure to say "thank you" again to the AGA for the privilege of having served as editor-in-chief of GASTROENTEROLOGY. Finally, as one septuagenarian to another, it is also a pleasure to wish the Journal continued good health, along with an abundance of health's key components in advancing age: good judgment, good news, and good circulation!



Raj K. Goyal, MD (Editor-in-Chief from 1986 to 1991)

Department of Internal Medicine, VA Boston Healthcare System and Harvard Medical School, Boston, Massachusetts

I was born and raised in Hisar, a small town in India. I received my bachelor of medicine and bachelor of surgery degrees from Amritsar Medical College

and my medical degree from Maulana Azad Medical College in Delhi. As a part of my medical degree, I conducted clinical research on peptic ulcer disease under the tutelage of Professor H. K. Chuttani. Based on the recommendation of Martin Floch, Howard Spiro invited me to New Haven, Connecticut, for a fellowship in gastroenterology at Yale University's affiliated program at Saint Raphael Hospital. Although my visa status kept me from applying for an NIH training grant, my research training at Yale University was supported by Fredrick Rose, a grateful patient of Spiro's who wished to fund studies that might elucidate the pathogenesis of the Schatzki ring.

My experiences in New Haven launched my lifelong exploration of esophageal physiology and gastrointestinal motility. This journey included several stints in Texas on the faculties of Baylor College of Medicine in Houston, UT Southwestern Medical Center at Dallas, and UT San Antonio. My enlightenment in research occurred under the mentorship of John Fordtran. In 1981, I moved to Boston to become the Mallinckrodt Professor of Medicine at Harvard Medical School and chief of gastroenterology at Beth Israel Hospital. In 1995, I was appointed associate chief of research at the VA Boston Healthcare System, where I am currently a

staff physician with an NIH-funded research laboratory that focuses on neuromuscular transmission in the gut.

I was involved in the founding of the American Motility Society (now called the American Neurogastroenterology and Motility Society). My most recent venture has been a web-based, open-access publication on pharyngeal and esophageal motility and its disorders called *Gastrointestinal Motility Online*, which I edit with Reza Shaker. I had a long-standing relationship with Gastroenterology, as a member of its board of editors and associate editor with John Fordtran (1977–1981) and then Robert Ockner (1981–1986), before becoming editor-in-chief.

While I was editor-in-chief, research trends in gastro-enterology continued to focus on quantitative experimental physiology, pharmacology, morphology, and pathophysiology of gastrointestinal disorders, based on papers published in the Journal. Around the same time, new journals that focused on specific areas of gastroenterology began to spring up and challenge the dominance of Gastroenterology as the premier publication in the field. After heated deliberations regarding these challenges, the board of editors decided that Gastroenterology should stay the course and continue to publish the best possible papers on all aspects of digestive disease. Our associate editors included not only prominent hepatologists but also a surgeon, a pediatrician, and a pathologist.

The board of editors had to deal with ongoing tension between clinical and basic scientists regarding the focus of Gastroenterology. Clinical gastroenterologists complained that the Journal was turning into a veterinary journal, with its focus on animal studies. Soul searching by the board of editors revealed that the major obstacle to publishing clinical papers was not that clinical studies were assigned an unfavorable priority, but rather that the supply of high-quality clinical papers was limited.

Did Gastroenterology achieve its goals of attracting and publishing the best research in the field during my tenure? In retrospect, the most monumental gastrointestinal discovery of that period was that Helicobacter pylori infection contributed to peptic ulcer disease and gastric cancer, for which Barry Marshall and Robin Warren were awarded the Nobel Prize in 2005 (Marshall BJ et al, Lancet, 1984). The initial observation by Marshall and Warren was not published in Gastroenterology. The role of H pylori was controversial, and reports for and against the pathogenic role of *H pylori* in peptic disorders were published in Gastroenterology. This is an example of the types of controversies that science editors face: whether to publish preliminary reports because they are potentially newsworthy and exciting or to publish only data that have been vigorously validated. In general, we favored publishing validated results rather than exciting but preliminary findings.

Another important role of the editors was to explain the complex results from basic science papers to the general readership. This resulted in the development of a column titled This Month in Gastroenterology, which was first edited by Stuart Spechler.

On the operational side, the Journal was now making money for the AGA, but there was the potential to make more. A careful scrutiny of finances helped to increase revenue and the operation of GASTROENTEROLOGY (Goyal RK, Gastroenterology, 1989) while maintaining a reasonable balance between advertising material and scientific content (Goyal RK, Gastroenterology, 1991). When W. B. Saunders Company took over publication of GASTROEN-TEROLOGY, the flow and tracking of manuscripts improved, the time from acceptance to publication was reduced to less than 3 months, and unit systems were changed to be consistent with those of other major scientific publications. Our major problem and expense was the slow mailing system. The contents of the original papers were organized under the categories of Alimentary Tract and Liver, Pancreas, and Biliary Tract to create

During my medical training in India, my family hoped that I would one day take over the clinical practice of a hometown friend who was a very successful practitioner. When I told my father of my plans to pursue research, his disappointment was obvious and he wondered aloud why I would become a doctor if I only wanted to teach and do research. I was supposed to return to India after 2 years of training in the United States, but that did not happen. My initial application for membership in the AGA was denied, and my initial applications for NIH funding were triaged. My prospects then looked bleak. Now, it seems ironic that the NIH has continuously funded my career in academic gastroenterology for almost 40 years. My appointment as editor-in-chief of GASTROENTEROLOGY was an honor that exceeded my wildest dreams.



Nicholas F. LaRusso, MD (Editor-in-Chief from 1991 to 1996)

Center for Basic Research in Digestive Diseases, Division of Gastroenterology and Hepatology, Mayo Medical School, Clinic, and Foundation, Rochester, Minnesota

I am pleased to summarize some key accomplishments of Gastroenterology when the editorial office was located at the Mayo Clinic in Rochester,

Minnesota. These changes were summarized in the last of 6 editorials I wrote with the managing editor, Anne Link, while I was editor-in-chief (Link AM et al, Gastroenterology, 1992, 1993, 1993, 1995, 1995; LaRusso NF et al, Gastroenterology, 1996).

Conquering time and distance was among our first major objectives. It was our challenge to accelerate the processing and publication of manuscripts. We also committed ourselves to expanding the geographic representation, quality, and scope of the Journal.

The most significant initial changes were invisible yet improved the daily operation of the Journal. We instituted a centralized editorial office so that administrative control and staff were maintained in a single central location. We also began to process manuscripts using tools that, at the time, were emerging technologies, such as computer tracking programs, large amounts of overnight mail, facsimile machines, and e-mail.

The results were gratifying; the time from initial submission to decision (turnaround time) for original articles was reduced by more than 30% (from 50 days to 35 days). Moreover, the time from final decision to publication (publication time) decreased from 9 months to just more than 3 months.

The success and effectiveness of the centralized office model were recognized by the AGA Governing Board. They too adopted this model, establishing a permanent editorial office in Bethesda, Maryland, the site of the association's national office. Although the Journal's board of editors changes every 5 years, the editorial staff remains in one place.

These modifications allowed us to expand the number and geographical location of associate editors. This increased the breadth and depth of expertise involved in the review process in an unprecedented fashion. Moreover, associate editors were able to concentrate exclusively on science, because they were no longer burdened with operational aspects. The board of editors was expanded to include international representatives, which was an appropriate advance given that 60% of papers submitted to the Journal at that time came from outside the United States. The first international associate editors were from Canada and Europe.

During my editorship, the impact factor of GASTROEN-TEROLOGY increased a remarkable 21%! Moreover, the immediacy factor (a measure of how soon after publication articles were being cited) was just less than 1 year, indicating the pertinent nature of the material we published. At this time, the Journal was ranked in the top 2% of the approximately 4500 scientific journals.

Several new sections were introduced to GASTROENTER-OLOGY during my editorship. A new Rapid Communications section allowed for fast review and publication of manuscripts of special scientific importance. The Journal also became a sounding board from which the AGA Governing Board could disseminate important policy and position information to AGA members. We were also privileged to be stewards of the Journal during its 50th anniversary. For this extraordinary occasion, we published 12 commemorative essays, each outlining past advances and anticipating what was to come in the science and practice of gastroenterology.

In 1992 and 1995, we conducted surveys to determine what initiatives our authors, readers, and reviewers considered important. We used the results to implement changes that benefitted the Journal, such as restructuring the review process; nearly two-thirds of reviewers began submitting comments in less than 21 days.

We also modified the format of GASTROENTEROLOGY; some of our changes to the front cover remain in place today. For example, we reorganized the table of contents and introduced structured abstracts to make the Journal easier to read.

Given the importance of the Journal to the financial health of AGA, we were proud that our annual operating budget actually decreased despite a substantial increase in the number of manuscripts received. As a result, we reduced the cost of processing each manuscript by approximately 40%.



Daniel K. Podolsky, MD (Editor-in-Chief from 1996 to 2001)

Department of Internal Medicine, University of Texas Southwestern Medical Center, Dallas, Texas

During my time as editor-in-chief, the board of editors comprised several colleagues based in Boston: Tim Wang, Anil Rustgi, Jake Liang, and Jules Dienstag (all from Massachusetts General

Hospital); Rick Blumberg and Jim Madara (from Brigham and Women's Hospital); and Tom LaMont (senior associate editor) and Jeff Matthews (from Beth Israel Deaconess Medical Center), who replaced Jim Madara. The board also included Michael Camilleri (Mayo Clinic), Fred Gorelick (Yale University), Neil Kaplowitz (University of Southern California), Ann Ouyang (Pennsylvania State University), and Guido Tytgat (Academic Medical Center, University of Amsterdam). The group provided expertise across the broad reach of gastroenterology. The Journal was based at Massachusetts General Hospital, where I was chief of the Gastroenterology Unit after completing my residency and fellowship in gastroenterology under Kurt Isselbacher. The Gastroenterology Unit at Massachusetts General Hospital was a thriving setting

that provided an outstanding environment to support the mission of the Journal.

Our board of editors was determined to build on the momentum of the previous editors to further enhance the quality of science published and the stature of the Journal. The primary focus was to attract original publications of substantial importance. The editors were proactive in soliciting important findings presented at meetings that might otherwise be sent to more general biomedical journals. During the 5 years that we served on the board of editors, landmark studies were published in clinical and laboratory research that set new paradigms in essentially all areas of gastroenterology. Some important review articles were also published during this time in the field of hepatology.

The weekly meeting of the board of editors served as a forum in which all manuscripts and proposed editorial decisions were reviewed by the entire group. The meeting was the highlight of each week and an opportunity for the editors to learn from the expertise of their

colleagues and, at the same time, ensure an intellectually rigorous and consistent process for making their final decisions. As a marker of our success, the impact factor continued to increase throughout the term of this board of editors and into the 2 years beyond transition to its successors. Throughout this period, GASTROENTEROLOGY was ranked in the top 20 of more than 2500 biomedical journals and was ranked the highest among specialty journals.

Although the primary strategy of the board of editors was to provide scientific quality, concurrent with raising the bar for publication, we initiated a number of innovative changes in substance and format to add value for readers. One substantive innovation included the Comment From the Editors, which was a monthly feature that provided a forum for a member of the board to address an important scientific controversy or factor that affected the direction of gastroenterology research. This feature expanded the expectations of the editors beyond assessing research manuscripts and continues to provide important commentary.

The Journal was further enriched by the addition of Gastroenterology News, which was initially written by John Walsh (University of California Los Angeles) before his untimely passing. This section highlighted developments that affected the field of gastroenterology, independently of the original content of the Journal. The Image of the Month feature presented interesting medical images with clinical explanations. For diligent and observant readers, the Journal included short biosketches of researchers for whom a particular disease or gastroenterology procedure was named, which was a labor of love for John Haubrich at UCSD.

An annual 13th issue was another substantial addition to the Journal. It was established to provide reviews on a

specific important area of clinical practice and science. These yearly thematic supplements included many of the Journal's most highly cited publications, and each provided a milestone reference in an evolving area of gastroenterology or hepatology.

Enhancements to the format of the Journal included moving away from the long-standing practice of displaying the table of contents on the cover to using it to highlight a particularly significant article, along with an eye-catching image. This approach, sometimes in a whimsical way, drew attention to articles of special interest. In addition, for the first time, the table of contents was divided to separate articles on clinical practice from those on basic research. Additional initiatives included reformatting This Month in Gastroenterology to provide short synopses of a few key articles, often with explanatory artwork.

Although the board of editors was pleased to be able to enhance the Journal with these innovations, other creative ideas to increase the quality of the Journal could not be implemented due to budget limitations. Limited funds were available for artwork for sections such as This Month in Gastroenterology, and perhaps more importantly, there were insufficient funds to provide significant copyediting, which would have improved the clarity of many of the papers ultimately published in the Journal.

The work of the board of editors was enabled by the leadership of the AGA, who supported the board's work and respected their editorial control over the content of the Journal. During the time I served as editor-in-chief of Gastroenterology, the Journal flourished in many ways and became stronger; it was of increased quality and stature when it was handed over to the next board of editors.



David A. Brenner, MD (Editor-in-Chief from 2001 to 2006)

University of California, San Diego School of Medicine, La Jolla, California

I have served as vice chancellor for health sciences and dean of the School of Medicine at UCSD since February 2007. In this role, I lead the UCSD School of Medicine, Skaggs School of

Pharmacy and Pharmaceutical Sciences, UCSD Medical Centers, and the UCSD Medical Group.

I am a translational scientist, working to bridge basic and clinical sciences. My research has focused on understanding the molecular pathogenesis of fibrotic liver disease and the genetic basis of liver disorders to find new ways to prevent and treat liver disease. I served as editorin-chief of Gastroenterology for 5 years.

I was recruited to UCSD from Columbia University Medical Center College of Physicians and Surgeons, where from 2003 until 2007 I was the Samuel Bard Professor and Chair of the Department of Medicine and physician-in-chief of New York Presbyterian Hospital/Columbia University.

I earned my medical degree from Yale University School of Medicine. After completing my residency at Yale-New Haven Medical Center, I served as a research associate in the Genetics and Biochemistry Branch of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases at the NIH. I first joined UCSD in 1985 as a gastroenterology fellow and later joined the

medical school faculty, serving as a physician at the Veterans Affairs San Diego Healthcare System.

In 1992, I became professor of medicine and biochemistry and biophysics and chief of the Division of Digestive Diseases and Nutrition at the University of North Carolina at Chapel Hill, where I continue to perform patient care and research.

When I became editor-in-chief of GASTROENTEROLOGY, publishing was undergoing a revolution that included online publication, electronic subscriptions, and prepublication access. Because of the uncertainties of the business of publishing academic journals, the AGA and the editors decided against self-publication of GASTROENTER-OLOGY and to continue its relationship with Elsevier. The board of editors also converted to a paperless review process, which shortened the manuscript turnaround time to the first response to authors to 29 days. The editors wished to reestablish a clear commitment to clinical and basic research in the Journal. Therefore, original articles were classified as either liver or alimentary tract and either basic or clinical. The goals were to allow readers to easily find papers in their specific areas of interest and to clarify what types of articles were being published. To further simplify the initial analysis of each issue, basic research articles had structured abstracts, whereas clinical papers had abstracts that followed the CONSORT guidelines.

After a great deal of debate, the leaders of the AGA decided to launch *Clinical Gastroenterology and Hepatology* (*CGH*). On the one hand, the AGA leadership recognized that many types of clinical manuscripts, such as patient reports, clinical series, and descriptions of new endoscopic technologies, were not suitable for publication in GASTROENTEROLOGY but were read by gastroenterologists.

Thus, a strategy was needed to broaden the readership. On the other hand, there was great consternation as to whether *CGH* would undermine the historic dominance of Gastroenterology as the world's leading journal for gastroenterology research. These concerns proved unfounded as *CGH*, under the leadership of its first editorin-chief, Michael Camilleri, established itself as an outstanding clinical journal without detracting from Gastroenterology.

Michael Camilleri and I developed a close professional relationship and frequently interacted and exchanged ideas to improve both journals. We published a joint statement on the mission of the journals (Brenner DA et al, Gastroenterology, 2002) and provided expedited review of articles that were not accepted for publication in GASTROENTEROLOGY but were considered suitable for *CGH*. Both publications flourished and the membership of AGA benefitted, receiving high-quality information from 2 complementary journals.

While I was editor-in-chief of Gastroenterology, there was also a revolution in basic and translational research. Enormous data sets were being generated by high-technology platforms to analyze gene expression, proteomic, and metabolomic patterns. During this transition from studying single genes and proteins to studying "-omics" (such as the entire gene expression profile of a specific cell or tissue type), a new approach was needed to present these large data sets, which did not fit into traditional publications. Gastroenterology began to allow articles to include online-only supplemental material to present large amounts of data. This approach has become the standard, and these data can be accessed by all readers of the Journal.



Anil K. Rustgi, MD (Editor-in-Chief from 2006 to 2011)

Departments of Medicine (Gastrointestinal Division) and Genetics, and Abramson Cancer Center, University of Pennsylvania, Philadelphia, Pennsylvania

As editor-in-chief of GASTROENTEROL-OGY, I was joined by an outstanding team of associate editors and special section editors at the University of

Pennsylvania (which served as the home base) and other institutions in the United States and Europe. A concerted effort was made to include experts from throughout the world, for example, from European and Asian countries.

Gastroenterology continued its rich history and tradition during this period of robust growth and expansion. Certain areas were increasingly emphasized, including but not restricted to clinical trials, liver and

pancreatic diseases, endoscopy and imaging, and review articles. Special sections were added to reflect some of these categories. This period marked the integration of social networking platforms (podcasts, YouTube, Facebook, Twitter, and others) for the dissemination of information by Gastroenterology. Tools were used to solicit author and reviewer feedback, making the Journal dynamic and plastic in its operations. The relationship between Gastroenterology and *CGH* was consolidated, increasing traffic of manuscripts between the journals to increase options for authors. Manuscript submissions grew each year, both from domestic and international authors. The impact factor was approximately 13, repre-

senting one of the highest impact factors of any specialty journal from all disciplines.

Scientifically and clinically, certain discoveries made during this period were transforming. These included molecular characterization of hepatitis B virus and hepatitis C virus (HCV), identification of a polymorphism near the *IL28B* gene that affected response to anti-HCV therapy, and the development of exciting and innovative targeted therapeutics (such as polymerase and protease inhibitors). These types of findings set the stage for a future in which more patients will be treated with specific combinations of therapeutics, perhaps culminating in all-oral regimens and a cure for HCV infection.

Similarly, studies in mice and humans elucidated mechanisms of the pathogenesis of inflammatory bowel diseases, initiating a new era of research for these disorders. Susceptibility to inflammatory bowel diseases was found to involve complex interactions among enteric pathogens (the gut microbiome), genetic factors (NOD2/

CARD15, IL-23, and IL-17), and features of the host immune response.

New avenues of immunomodulatory therapeutics achieved prominence, and the unremitting pace of advances in technologies such as genomics (eg, deep DNA sequencing), microarray analysis, and proteomics has increased our understanding of disease processes at the molecular and cellular levels. Technological advances such as confocal endomicroscopy and endoscopic narrow band imaging also improved our ability to image cells, tissues, and whole organs.

Clinical practice became increasingly complex, not only from the opportunities provided by these technologies and personalized medicine, but from the vicissitudes of health care reform and the NIH research budget. During this period, Gastroenterology helped authors and readers to navigate the rapidly changing landscape while presenting the most exciting and recent findings in medicine and science.



M. Bishr Omary, MD, PhD (Editor-in-Chief from 2011 to 2016)

Department of Molecular & Integrative Physiology, University of Michigan Medical School, Ann Arbor, Michigan

I was born in 1954 in New York, New York. I received my bachelor's degree from George Mason University, my doctorate from the University of California, SD), and my medical degree from the

San Diego (UCSD), and my medical degree from the University of Miami. I completed my residency in internal medicine at the University of California Irvine and my fellowship in gastroenterology at UCSD. I became assistant professor of medicine at Stanford University in 1989 and remained there until 2008; I also served as chief of the Division of Gastroenterology and Hepatology from 1999 to 2003. In 2008, I became chair and professor of physiology as well as professor of medicine at the University of Michigan.

It is difficult, if not impossible, to emulate and follow in the footsteps of the amazing editors and stewards of the rich history of GASTROENTEROLOGY. I learned a tremendous amount from my colleague and friend Anil Rustgi, under whom I served as associate editor. In fact, it was this wonderful experience, coupled with the strength of the gastroenterology program at the University of Michigan (which includes senior associate editors John Carethers, Anna Lok, and Chung Owyang), that provided me the impetus to seek the honor of overseeing the Journal. Our current group of outstanding editors is based within and outside the University of Michigan.

Our editorial team aims to maintain the excellence of the prior editorial teams while introducing new ideas and concepts that are deemed timely and beneficial. Similar to previous editorial teams, we make every effort to adjust to and anticipate the needs of our readership and future directions of the field. We continue to aim to publish the best clinical, translational, and basic research articles. We also continue to enhance our service to authors and the readership, aiming to maintain a high bar of excellence while striving for efficiency in handling manuscripts and other operational endeavors (such as making manuscripts available online within 1 week of acceptance and working with Elsevier to reduce the time to 2 days). New elements introduced since our team started in July 2011 include:

- The Mentoring, Education, and Training Corner Section. This section, edited by John Del Valle (Del Valle J, Gastroenterology, 2011), allows renowned experts and trainees to provide their perspective on mentoring, education, and training. The section covers the entire spectrum of digestive disease–related careers, from academic to community practice.
- Brief Reports. These are short articles (1200 words) that introduce a new concept or insight into an important topic in gastroenterology or hepatology. Several manuscripts have been submitted and published in the past year. During 2012, there were 162 brief report submissions (of a total of 1983 original manuscripts), 18 of which were published. This

11.1% acceptance rate for brief reports is very similar to our overall acceptance rate.

- Gastroenterology in Motion. Gastroenterology in Motion is a video section edited by Ralf Kiesslich and Thomas D. Wang (Kiesslich R et al, Gastroenterology, 2012). It highlights the visual features of our specialty, presenting new tools and technologies in imaging and endoscopy (including those that allow visualization at the cellular or molecular level) that aid in the diagnosis and treatment of patients.
- The Commentary section. This section has been expanded to include perspectives on timely topics provided not only by our associate editors (as has been the case) but also other experts. Commentaries are distinct from editorials, which discuss manuscripts in the same issue. We typically publish 1 to 2 commentaries per issue.
- Acknowledgment of joint first authors in the reference list of articles. Over the past several years, co-first authorship has increased due to the growth of interdisciplinary research. To acknowledge co-first authors, we now ask authors to use bold type for the names of co-first authors in the reference section of the manuscript (Dubnansky E et al, Gastroenterology, 2012). This policy appears to be well received by authors, and we anticipate that other journals (possibly even PubMed) may follow suit as the number of articles with co-first authors increases.
- Increased digital presence. Some of our content now is exclusively web based, including sections such as Press Highlights (edited by Grace Su and Kris Novak) and Meeting Summaries, which highlight topic-specific national and international conferences. We have also noticed an increase in the amount of supplemental information (available only online) provided with each manuscript. This is a uniform trend across journals; we have not yet had to limit the amount of supplemental information included in each article, but we might ultimately need to do so.

GASTROENTEROLOGY abstracts and full-text articles can now be accessed on the iPad. Select articles include video abstracts and podcasts, available on YouTube and iTunes. Also, certain articles in the print issue include Quick Response (QR) codes, which take readers directly to online-only content. The social media presence of Gastroenterology has also expanded on Facebook, Twitter, and a blog, aptly called The AGA Journals Blog, which began when Anil Rustgi was editor-in-chief. These technologies are clearly the wave of future science communication.

I owe a tremendous debt of gratitude to our editors and editorial staff, led by Erin Dubnansky, who work tirelessly to ensure that we provide our readers, authors, and reviewers with the best service possible. They increase the honor, joy, and privilege of assuming responsibility for the Journal, making it a hugely fun and learning experience. I am also indebted to Raj Goyal for taking the initiative to chronicle the 70-year history of Gastroenterology. Without his lead, this commemorative tribute would not have been possible.

It is difficult to predict where Gastroenterology will be in 10 years. I suspect the print form of the Journal will still be in place, but I am less sure whether that will be the case 20 years from now. As the new kid on the block, it is humbling for me to be counted in the same company of the distinguished past editors of Gastroenterology, who not only made it the leading journal in its field but have also made great individual contributions to gastroenterology and hepatology research.

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Reprint requests

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Conflicts of interest

The authors disclose no conflicts.