

# The Ingelfinger Rule: Franz Ingelfinger at the New England Journal of Medicine 1967-77

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Where do we obtain our facts as well as our theories? Both are being published daily, in the medical journals that we read. Medical journals help to shape our medical knowledge by supporting a theory, or by challenging a theory with facts, or by deliberately pointing to new theories. Who decides what we read? The editors.

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In 1969, the *New England Journal of Medicine* instituted the Ingelfinger rule, an embargo designed to keep scientific findings out of the media until peer-reviewed and published in the *Journal*. The rule's founder and namesake, the famed *New England Journal* editor Franz Joseph Ingelfinger (1910-80), stated that no article he printed should be published elsewhere beforehand and, furthermore, that a scientific claim should always be validated before dissemination to the public. Thus, the rule prohibited scientific authors from releasing data to the mass media before the *Journal's* date of publication.

Although 25 years have passed since Ingelfinger's decade-long editorship ended in 1977, his influence on scientific publication remains incontrovertible. The rule he established and formalized is now, in one form or another, a recognized protocol for most peer-reviewed medical and scientific journals. Who was Ingelfinger, and what was he like? How did the Ingelfinger rule emerge, and how did Ingelfinger's conception of it evolve throughout the 1970s? The

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current article addresses these questions.

## Before the Editor

Ingelfinger stood just over 6 feet tall and had a lean, rugged frame. By his late 20s, he had noticeably receding light brown hair, and behind his large, wire-rimmed glasses he had the quick, analytic eye of a perfectionist. His critical tongue elicited

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fear from his 50-some medical fellows (and two children). Those who knew him intimately as a friend, colleague, or teacher spoke of a greater-than-life personality who could make cowards of grown men and produce residents whose devotion, one former student wrote, "is best described as idolatrous".<sup>2</sup> When he was aggravated, irritated, or frustrated, he had a peculiar inclination to lean over and bite down on the upper arm of his shirtsleeve, on his tie, or on his handkerchief.<sup>3</sup>

He preferred small quarters, at one time crowding himself and three secretaries into the hustle and bustle of a tiny office—thriving on the inverse relationship between working space and accomplishment, which he believed rested on the "enhanced flow of communication forced by physical constraints".<sup>4</sup> Throughout his life he was an active, vigorous man. At his country house in Ipswich, Massachusetts, he rose every morning at 4 AM to write in his chapel-like office—and when the rest of the household finally stirred to life, he filled the house with the aroma of his special pancakes, which were paper-thin and crispy around the edges. He played var-

sity football at Yale, hosted touch-football games at staff picnics each fall (he usually ensured the outcome by selecting all the big, fast residents for his team), and took his children traveling around the world.<sup>5</sup> In his later years, he dug, fertilized, and pruned in his Ipswich garden, never losing the spirit of rivalry. In the summer under his direction, the children and grandchildren would cultivate personal "competitive gardens", each vying to grow the most acorn squash and tomatoes (personal communication, Julie Ingelfinger, 15 October 2001).

When he became editor of the *New England Journal of Medicine* in 1967, Ingelfinger was one of America's leading gastroenterologists, at the pinnacle of academic gastroenterology and chief of a large and thriving clinical service. Colleagues credited him with "converting gastroenterology from a field of dogma and witchcraft to a scientific quantitative discipline".<sup>5</sup> That year, he was on the brink of a career change that would broaden his legacy and establish the Ingelfinger name in medicine as a whole, as well as in scientific publishing. But in the preceding 3 decades, he had worked hard to rise through the ranks of his specialty.

Born in Dresden, Germany, in 1910, Franz Ingelfinger was the only child of Eleanor Holden and Joseph Franz Ingelfinger. His mother was a Yankee schoolteacher who taught English literature, Latin, and mathematics (and continued to teach until she was 81 years old).<sup>5</sup> As Franz would be, Eleanor was strong-minded and without tolerance for fools. She was raised in Swampscott, Massachusetts, and, after graduating from Smith College, entered graduate studies at the University of Göttingen. There she met and wed Joseph Franz Ingelfinger, an instructor in bacteriology and a scholarly man devoted to the study of classics.<sup>5</sup> In 1920, when Franz was 10, the family left

postwar Germany and returned to Eleanor's hometown of Swampscott, where she taught at the Shore Country Day School and Joseph established a general practice as a physician. Joseph's care, like his son's later would, made a lasting impression on his patients. As recently as 1995, the Ingelfinger family still received phone calls from Joseph's old patients asking to speak to their former doctor and not knowing that he had died in the 1950s. And to this day, the family continues to receive inquiries from Franz's patients.

After study at Phillips Academy Andover, Franz majored in English at Yale, engaged in a broad liberal-arts program, and graduated Phi Beta Kappa. Originally he planned to enter the business world. However, in 1932, his senior year and the pit of the Depression, Franz faced dwindling job opportunities on Wall Street and hastily completed the necessary requirements for entrance to medical school. At Harvard Medical School, he earned election to Alpha Omega Alpha and began a career devoted to clinical research and teaching in gastroenterology. The initial reasoning behind this career decision was characteristically Ingelfinger: He wanted to break new ground, and "nobody else was doing it." More specifically, Franz's interest was ignited in the laboratory of T Grier Miller, a consummate clinician, and William Osler Abbott, a creative investigator with a "knack for designing double-lumened tubes that could be placed anywhere in the intestinal tract."<sup>5</sup> (The two are remembered as the inventors of the Miller-Abbott small intestinal tube.) In their laboratory, which Ingelfinger called "the small bowel capital of the world", he blossomed under the Miller-Abbott tutelage and learned the techniques available for studying the gut. In 1941, he married a New York art designer, Sarah Shurcliff, with whom he had two children, Joe and Lisa.

Abbott became Ingelfinger's dear friend. "If any one person", Arnold Relman, Franz's successor as editor of the *New England Journal*, wrote, "can be said to have had a decisive influence on a mind as independent as Franz Ingelfinger's, it

was Abbott."<sup>5</sup> Abbott, whose career was cut short when he died a few years after Ingelfinger studied with him, became the namesake of Franz's son, Joe Abbott Ingelfinger.

For the next 30 years, Ingelfinger served as chief of gastroenterology at the Evans Memorial Department of Clinical Research of the Boston University Medical Center and produced over 50 fellows in training. Over half the "Fingerlings", as they came to call themselves, remained in full-time clinical investigation, and many came to direct their own GI units in medical schools across the country. In 1961, Ingelfinger took on the additional responsibility of transforming the formerly dilapidated Boston University Medical

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Service at Boston City Hospital into one of national repute.

As his career developed, Ingelfinger took on editorial responsibilities. He served on the editorial board of the *New England Journal of Medicine*. He chaired the editorial board of *Gastroenterology*, edited the section on digestive diseases of the *Year Book of Medicine*, and was a two-time member of the editorial board of the *Journal of Clinical Investigation*. And he edited a successful book called *Controversies in Internal Medicine*. In 1967, Ingelfinger took command of the *New England Journal* with extensive editorial experience and quickly crystallized a solid vision for his editorship.

### A New Career

Had Ingelfinger died in the middle 1960s, he would have been remembered solely as an authoritative clinician and formidable academic. Instead, he lived for another 15 years and came to be renowned in the

wider worlds of medicine and journalism, even after his death, for his innovative and autocratic editorship at the *New England Journal of Medicine*. His love of controversy and competition would add much to its reputation and circulation. He sought to broaden the scope of the journal with "special articles" about social and ethical aspects of medical care. He introduced the now-famous literary talents of Lewis Thomas, a physician and essayist, under the title "Notes of a Biology Watcher" and added a monthly Washington column, "Medicine and Public Affairs", penned by Dan Greenberg. Twenty stable years of editorship under his predecessor, Joseph Garland, had increased the *New England Journal's* circulation from 20,000 in 1947 to 100,000 in 1967—and by 1977, when Ingelfinger ended his 10-year term, that figure had risen to 175,000.

At age 57, Ingelfinger took reign, unifying his policies under a vision that, like that of his former career as a gastroenterologist, was founded on the education of the medical community. "Teaching, above all", he stated, "is the task of the all-purpose medical journal."<sup>6</sup> Challenging the journal to serve a new purpose as a medical school without walls, he strove to emulate the symbiotic relationship between the teacher (now author), student (now reader), and dean (now editor), whereby they furthered collective medical knowledge.

### Education and the Ingelfinger Rule

The crux of Ingelfinger's editorial philosophy rested in the belief that fresh contents made an indispensable contribution to a journal's teaching goals. "Without original articles", he wrote, "our printed efforts would become nonviable, gutless shells." Ingelfinger admitted he had no evidence to support this belief, yet he argued on intuition that originality engaged the reader: "The reader's appetite is less dulled by the flavor of predigestion, and his self-esteem is sustained by the fact that his cerebral exposure to the new is direct, not through a dialyzing membrane."<sup>6</sup>

Considering the tumult gripping actual university campuses in 1970—catalyzed

## *The Ingelfinger Rule continued*

by the growing critique of science and its service to corporations and the military—Ingelfinger’s notion of the *New England Journal* as a pure realm for the flow of information, overseen by a benevolent dean and free of politics and social protest, in some ways presents a striking utopian vision of the governance of scientific knowledge. Driving this ideal, however, was an authoritarianism that, as part of his personality, powered much of his work. Over the 10 years of his editorship, Ingelfinger actively sought to establish and maintain the jurisdiction of the journal. In turn, from the very beginning he vehemently opposed what he saw as unruly, ungovernable practices in medical journalism.

Let us insist that policies of pure *laissez-faire* have no place in our complex society, and that all who put the word of medicine on paper—whether literateurs or journalists—must for the common good recognize and observe certain rules of conduct.<sup>7</sup>

To Ingelfinger’s alarm, however, rising numbers of journals, prior publication in free trade publications, and the general post-WWII proliferation of science coverage in the media presented a dangerous threat to the journal’s capacity to print original content and thus to its ability to educate.

In response, in 1969, 2 years into his editorship, Ingelfinger formalized the policy that became known as the Ingelfinger rule. Almost immediately, prospective authors began receiving letters politely prohibiting them from speaking with reporters until after publication. If the author chose to ignore this rule, or even if results were published elsewhere unbeknownst to him or her, the journal would reject the paper. Such controls as the Ingelfinger rule thus served the “common good” by setting the groundwork for “certain rules of conduct”—conduct, in Ingelfinger’s mind, best defined and administered by the *New England Journal of Medicine*.

### **A Very Big Business**

The middle 1970s marked a conceptual

shift from Ingelfinger’s idealistic image as editor-dean to the more practical view of himself as an editor-journalist. Faced with the operational challenges of competition, he moderated his educational vision with a savvy business approach. He began to view medical news as territory over which the *New England Journal* had to compete for control with many other media outlets. Wrote Ingelfinger,

when territory is in dispute, it is always hard to draw a sharp boundary, and the more precise a boundary, the greater the opportunity for unhappy repercussions. [But] if the *Journal* did not try to keep physicians up to date but rather published only after everything was cut and dried and ready to go into a textbook, our periodical would inevitably decline in importance, status and readership.<sup>8</sup>

Although his commitment to the educational function of the journal remained constant throughout his term, this defense of the rule reflects a clear conceptual development of the journal’s role in science communication. The reality of competition had in fact tempered his original maxim that “teaching, above all, is the task of the all-purpose medical journal” to a recognition that the pursuit and dissemination of news is “a big, very big business”.<sup>8</sup>

### **In Control of a Public Organ**

The Ingelfinger rule undoubtedly supported the *New England Journal’s* survival in a competitive market, as well as the economic necessity to maintain and increase circulation. But also underlying Ingelfinger’s rationale was his view of the journal’s public responsibility. In the early 1970s, the opinion that the public had the right to know about laboratory work—even before a scientist deemed his or her project complete—was gaining momentum.<sup>9</sup> As evidenced by discussions at meetings and letters to editors, many doctors perceived this movement as a threat to their profession and an encroachment on what they wished to maintain as specialized knowledge. Thus, broad-based public interest in and demand

for medical news, Ingelfinger argued, necessitated dependence on the journal as a reliable purveyor of news. “We have to face the facts”, wrote Ingelfinger. “We have on our hands an organ [the *New England Journal*] that has become a prominent public figure, with the trials as well as perquisites of such a position.”<sup>8</sup> As a popular source of medical information and a role model, Ingelfinger reasoned, the *New England Journal* held a growing responsibility to filter the information disseminated to the public.

However, Ingelfinger realized that to simply craft a competitive machine was not enough to protect the journal’s influence from diffusion. To this end, he fueled the journal’s prestige by also tearing down the credibility and authority of other sources of medical news. A limitation of the mass media, he warned, was that “although they pride themselves on reporting accurately, there is no assurance that what they report is accurate in the first place.”<sup>8</sup> The *New England Journal*, he said, must actively prevent “exaggeration and misrepresentation” from getting out to the mass media and thus the public:

One effect of the escalating public interest in medical news is that general medical journals that are *reliable* and have maintained their newsworthiness are increasingly cited [emphasis mine]. These journals thus eventually transmit research findings to the public as well as to the health-care professions. To help prevent exaggeration and misinterpretation by the lay press and by the public, general medical journals must evaluate submissions in a broader than traditional context.<sup>8</sup>

The Ingelfinger rule articulated Ingelfinger’s definition of accuracy by weeding out the sensationalized ballyhoo of journalistic medical stories from proper medical literature. The rule created a formal dependence of the lay press on medical literature for information; it supported the notion that the only medical research information communicated to the public should be that published in a journal and thus approved by peer review.

In conclusion, the Ingelfinger rule represented a response to two changes in science communication in the 1970s. First, competition forced the medical journal to develop a way to protect its newsworthiness. Second, the increasing sentiment that “the public has a right to know” and the backlash to this attitude in the scientific community meant, for Ingelfinger, that the medical journal must take on greater responsibility (and develop rules) to control public well-being. Wrote Ingelfinger,

We must recognize that the ideas promulgated within our covers not only will be seen by knowledgeable professionals but also may be the source of secondary news stories that may elicit inappropriate public or legislative reactions. Somehow, we must try to be both trustworthy and newsworthy—a balancing act of redoubtable propor-

tions.<sup>8</sup>

Such was the vision Ingelfinger took with him to his death when in 1980 he passed away after a 5-year bout with esophageal cancer. The shifts in his perception of the medical journal from a university-like “campus” to a “big business” and finally to a “public organ” reflected how he dealt with concerns in medical journalism coming to a head during this time. In response, he developed and upheld the Ingelfinger rule and through his far-reaching vision for the *New England Journal of Medicine* developed a clear, authoritative role for the general medical journal that still echoes true in science communication today. 🍷

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