



## Richard Paul Korf (1925-2016)

Donald H. Pfister of, Harold H. Burdsall Jrb, Teresa Iturriagac, Linda M. Kohnd, Amy Y. Rossmane, and Wen-Ying Zhuangf

<sup>a</sup>Farlow Reference Library and Herbarium, Department of Organismic and Evolutionary Biology, Harvard University, 22 Divinity Avenue, Cambridge, Massachusetts 02138; <sup>b</sup>Fungal and Decay Diagnostics LLC, 9350 Union Valley Road, Black Earth, Wisconsin 53515-9798; <sup>c</sup>Illinois Natural History Survey, University of Illinois, 1816 S Oak Street, Champaign, Illinois 61820; <sup>d</sup>Department of Biology, University of Toronto Mississauga, 3359 Mississauga Road, Mississauga, Ontario L5L 1C6, Canada; <sup>e</sup>1808 NW Sunview Drive, Corvallis, Oregon 97330; <sup>f</sup>State Key Laboratory of Mycology, Institute of Microbiology, Chinese Academy of Sciences, No. 1 Bei-Chen-Xi Road, Chaoyang District, Beijing, 100101, China

"With poetry, the tune is in the words themselves—and once you begin to hear it, it will stay with you."

Richard P. Korf, notes to his narration of

John Brown's Body

We hear the words and we celebrate, for few have had such a long and distinguished mycological career as Richard Korf. Other than a 1-year appointment as Lecturer in Botany at the University of Glasgow (1950–1951) and sabbatical sojourns, his career was spent at Cornell University in the Department of Plant Pathology. The department and Cornell were the center of his academic life; his family was the heart of his being.

**Early years and graduate school.**—Richard Korf's association with Cornell began in 1942 as an undergraduate and led to a Ph.D. in 1950.

"I arrived as a freshman student on the Cornell campus ... just turned 17 years of age, coming from a well-to-do middle class family with homes in Westchester County, New York, and in New Fairfield, Connecticut. I was the product of a prestigious private school, Riverdale Country School in New York City, and chose Cornell University for study with the vague notion that I might like to become a gentleman farmer." (Korf 1991)

He sometimes joked that he thought of being a chicken farmer or, as some remember the telling, Cornish game hens rather than simply chickens; this ambition was attributed to the influence of a favorite Cornell professor in poultry science. But, we owe Dick's presence in mycology to the influence of two great Cornellians, Herbert Hice Whetzel and Harry Morton Fitzpatrick.

After completing his undergraduate work, Dick immediately began graduate studies at Cornell in the Department of Plant Pathology. His thesis began under the direction of Fitzpatrick, mycologist in the department. When Fitzpatrick died in December 1949, Donald S. Welch served as his advisor. William L. White at Harvard, who had studied with Whetzel, and John A. Nannfeldt in Uppsala, the reining expert on inoperculate discomycetes, were readers for the thesis. Several new combinations were proposed, and a new species, *Arachnopeziza fitzpatrickii*, was described. This, the first species Dick named, is dedicated to his "friend and teacher."

His thesis was a classic monograph of the tribe Arachnopezizeae (Korf 1951), a group that then included three genera of the Hyaloscyphaceae. The tribe is now recognized as a distinct family, the Arachnopezizaceae. His treatment was the standard reference for these genera for many decades. It was comprehensive—types were consulted and designated, exact dates of publication were determined for priority, and full bibliographic information on illustrations and exsiccatae was listed. Many of his students used the thesis as a model as they worked on their own monographic treatments.

An innovative aspect of the thesis was the reintroduction of terminology used in the description of apothecial construction. These tissue types were introduced by Starbäck in the 1890s but not widely applied. In his thesis, Dick provided descriptions of the tissues and a key to be used for their identification. Although the system was known, it was not until Korf refined and reintroduced it that it gained widespread use. This contribution changed the vocabulary employed in the

description of discomycetes. He later revised and expanded the terms in the important Volume 4a of *The Fungi: An Advanced Treatise* (Korf 1973). Nearly every discomycete description uses this terminology.

Monographic studies and field work.—Much of his taxonomic work followed this early pattern of careful analysis of specimens and literature. In geographical scope, his work ranged widely. With National Science Foundation support, he collected fungi in Japan and other parts of Asia, the Caribbean, and Macaronesia. This resulted in series of papers, "Japanese discomycetes (I-XVII)," "Discomycete flora of Asia (I-II)," and "A preliminary discomycete flora of Macaronesia (1-18)." In these papers, species were described and important comments on genera and distributions were made. In the Macaronesian series, each paper was introduced with a quotation, often poetic. For the Vibrisseaceae (Iturriaga 1995), in which spores are dispersed in the water, he chose a translation from Blaise Pascal, "Rivers are highways that move on, and bear us wither we wish to go."

Field work was always a pleasure and an adventure for Dick. Rambling near Beebe Lake on the Cornell campus or in the Lloyd-Cornell Preserves, he discovered new fungi and recorded new distributions. He was one of the founders of the New York State Peck Foray. He relished seeing new places with new and different fungi. Both for the warmth of the climate and the diversity of the fungi, he was drawn to the tropics. He shared his enthusiasm for these locations with his students and made it possible for many of them to experience the wonders of tropical fungal diversity. His joy in collecting inspired and motivated everyone around him. When collecting was poor for discomycetes, he did not hesitate to search for other fungi but generally he avoided larger basidiomycetes. Much to the dismay and irritation of those who rushed along a forest trail in search of these larger fungi, Dick would stop, perhaps a few meters in to a site, and begin turning leaves, examining petioles, and picking up sticks. Those who rushed ahead might be convinced to return when whooping and calls announced that something wonderful had been found. "Sacrebleu!" was a favorite profanity. Under his guidance, one developed eyes for these little cups, one developed patience, and one often never got to the end of the trail.

Sometime he planned collecting trips around particular fungi or a search for lost types of critical species. He ventured out to recollect in "classic" localities. One such trip was with students to Europe (Korf 1988), where type localities were searched for specimens that could act as substitutes for lost holotypes. One of us remembers going

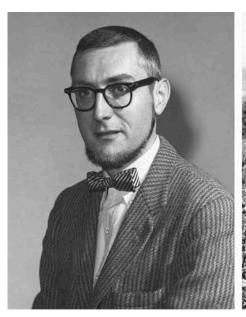
to El Yunque National Forest in Puerto Rico with Dick and a large contingent of students. The intent was to collect fungi reported from the locality years before. When *Pachyella adnata*, one of the targets, was found, Dick's comment was typically understated, "It is always good to come so far and find what you are looking for."

## Concepts, ideas, curiosity, and broad training.—

And he looked for ideas far and wide as well. He was interested in concepts. At one period, he instigated a discussion with his students on the concept of the genus. Dick would challenge us, "Is a genus real or a human construct?" and "What is the indivisible unit in evolution?" We would discuss our ideas over peanut butter sandwiches and Luzianne coffee in the teaching lab. His Presidential Address to the Mycological Society of America (Korf 1972) incorporated a synoptic key based on ideas introduced by P. W. Leenhouts. Dick insisted that dichotomous keys were to some degree tyrannical because they forced the user to follow the author's choice of characters in a key. This often meant struggle and in the end the abandonment of the key and the identification. He introduced mycologists to the synoptic key, which allows multiple entry points into a key using characters of the user's choice. Mycologists have adopted this format, especially after the introduction of computers.

Dick believed biological collections were of critical importance. He worked as a vigorous steward and protector of the Cornell Plant Pathology Herbarium (CUP), the fifth largest fungal herbarium in North America. His dedication to herbaria was carried forward in campaigns to protect North American herbaria—including CUP—after his retirement. Cornell held the large collection of Shu Chun Teng for many years. Teng had spirited the collection out of China in the 1940s. Through Dick's support, this collection was returned to China; he believed it should be where it could be studied locally. He supported collections, both large and small, through donations of specimens, for example, his Discomycetae Exsiccatae, and gifts of Mycotaxon. He was the person to whom a curator or herbarium director could turn for a letter of support for their institution.

Although primarily a descriptive mycologist, he insisted that his student know genetics. It was he who clarified the concepts of homo- and heterothallism in a short note in *Nature* (Korf 1952). In lectures, he delighted in referring to the work of Guido Pontecorvo on the parasexual cycle and the discoveries by B. O. Dodge that came with the development of *Neurospora* as a tool in genetic studies. Certainly he would touch on the science but also the personalities behind





Left: Richard P. Korf, 1961. (Photographed by Howard H. Lyons, courtesy of the Plant Pathology Herbarium, Cornell University, http:// www.plantpath.cornell.edu/CUPpages/CUPphotos.html.) Right: Richard P. Korf collecting in Hungary at the 8th European Mycological Congress with discomycete specialist Mirko Svrček, 1978. (Photographed by Jaroslav Klan, courtesy of the Plant Pathology Herbarium, Cornell University, http://www.plantpath.cornell.edu/CUPpages/CUPphotos.html.)

the discoveries. Dick knew Pontecorvo from the early year he spent in Glasgow, and he had great respect for Dodge.

Service to the mycological community.—Dick's contributions to the mycological community are many. For the Mycological Society of America (MSA), he served as councilor, secretary-treasurer (which in those days also included editing the MSA newsletter), member of the editorial board, and book review editor for Mycologia. He moved through the ranks to president. On the international scene, he served on and chaired nomenclature committees, including the Committee for Fungi and Lichens. He attended most of the International Mycological Congresses until Edinburgh in 2010, where he received, in absentia, the Ainsworth Award.

Without doubt, his most impressive international undertaking was the founding in 1974 of the journal Mycotaxon. He and his great friend Grégoire Hennebert established the journal to expedite publication, to avoid page charges, to provide a place where lengthy articles were welcome, and they endeavored to make the journal financially available. It was intended to be a journal that, like taxonomy and nomenclature, would "transcend national and linguistic borders" (Korf 1974). The journal, in many ways, presented a socialist view of the world and the pragmatic views of its founders. In the early 1970s, Dick had published articles in the journal *Phytologia*, and it was on this journal that Mycotaxon was modeled in

part. In those days, *Phytologia* was a cottage industry run by Harold Moldenke to provide a fast outlet for research. It was a typescript, photo-offset production of marginal quality, and articles were not peer reviewed. Dick took the idea of Phytologia, improved on it by standardizing formats and type fonts to produce more uniform pages, and he required reviews that were instigated by authors. This last aspect raised some debate. His ingenuity was called upon in launching the journal. In the days of typewriters, before computers and word processing programs, he devised printed templates to be used in manuscript preparation. Printed in nonphotographable blue ink, this template delimited the margins and starting points on pages so that reductions would be uniform. At the start he acted as editor, editor-in-chief, publisher, and mailroom attendant. We are reminded of his typing—two fingers and very fast—on the then very modern IBM Selectric typewriter. In the early years, he greased the wheels of publication by typing "author prepared" copy for authors, for example, his student John R. Dixon's 1975 monograph on Chlorosplenium, Chlorociboria, and Chlorencoelia. Mycotaxon came to be his regular outlet for notes on fungi, nomenclature, and historical accounts. Eighty-eight articles by him and with his students appeared up to 2011. This was in addition to scores of book reviews both for Mycotaxon and Mycologia. He was prolific, focused, and independent.

Dick's published productivity was only part of his output. Students and colleagues alike depended on his critical eye. In his own writing, he strove to avoid what he termed

"darlings," and he drove his students to root out these distracting indulgences. He frequently directed his students to Strunk and White's The Elements of Style with the hope of improving their writing. He reviewed papers with a vengeance. Editorial ink would fly and on occasion he would just rewrite a paper. These contributions were often acknowledged but sometimes went without notice. He believed in signed reviews, understanding that it was important to be responsible for one's views. He acknowledged that his students needed to know how to review papers and to that end often shared with them reviews he wrote. It was a thoughtful gesture aimed at preparing them for a life in academia. His reviews could be harsh, but the comments were always aimed at the work, not the person.

Much of his career was dedicated to nomenclature. His goal was to have clear and concise application of names. He published a series of papers under the title "Nomenclatural notes (1-12)" in which he undertook to set the record straight on the Code and its implications in name stability. In searching for a stable, reliable nomenclature, he sometimes upturned names in conventional use and in the process upset colleagues. One of his opponents was Mme Marcelle Le Gal. Already miffed by his misreading and publication of her recipe for cotton blue in lactic acid, used to observe spore ornamentation (he read boil; she wrote grinding) (Korf 1960), they sparred over generic names and the Code of Nomenclature. To her, he was the young mycologist who was muddling the naming in the discomycetes. She (Le Gal 1958) lashed out at him in a paper he graciously recommended his students read, "Petite promenade à travers le maquis de la nomenclature" ["A stroll through the thicket of nomenclature"]. One might associate the concept of the thicket with the scrubby vegetation of the Mediterranean or the French resistance movement of World War II. The piece was highly critical of him. In 1981, Dick reminisced about Le Gal. He wrote: "For years I licked the wounds inflicted by her vitriolic attack on 'le jeune mycologue américain ... That she eventually forgave my youthful exuberance was one of my great joys" (Korf 1981). And so it was with others as well.

Life **outside the classroom.**—Dick was youthfully exuberant, generous, and hospitable. A sojourn on Exe Island Biological Station, his summer retreat in Canada, was bliss. His labs both at Cornell and in the Victorian cupola at Exe Island were meccas for students and scholars from around the world. But, he could be gruff, forthright, and, some might say, arrogant. R. W. G. Dennis at Kew and Dick were often at odds. In the Department of Plant Pathology, he stood apart as somewhat bohemian and politically left-leaning. He was often at loggerheads with his department colleagues during the Vietnam War years and concerning the future of the herbarium. While most of the department faculty played baseball together and socialized, he kept a certain distance. Indeed, not until late in his career, with a change of generations, did he seem fully comfortable in his departmental setting.

Given Dick's solid upper middle class background, it is perhaps a surprise to consider his politics. He was active in the Liberal Party of New York and ran for political office. He was outspokenly against the Vietnam War. There was talk of moving to Canada and at Cornell, which was a turbulent place then, he was active in antiwar protests. He spoke to activist student groups, including the radical Students for a Democratic Society. His fellow faculty members were not pleased with him for his activities and neither were some mycologists, but his actions were humane, moral, and principled.

His advice to some of us was "don't do administrative work until you are older and at the end of your career." He followed this advice; some of us did not. As a senior member of the Department of Plant Pathology, he was named the acting chair and, in what must be the first instance of its kind, also filled in as chair of the Department of Theatre Arts at Cornell. Acting had been an avocation since his high school days. He often acted in local productions, particularly early and late in his career. He loved Gilbert and Sullivan. For his students, it was disconcerting to see their professor transformed on stage to a new and different personality. One of his most widely known and vivid performances in mycological circles was his portrayal of Elias Fries at the International Mycological Congresses in Vancouver and Oslo. His voice is captured in several recordings, but the most treasured is the 12-CD set of his reading of Stephen Vincent Benet's John Brown's *Body*. In his notes to the recording he says,

"The theatre has been my lifelong passion. I performed during my college years at Cornell University ... and I continued to perform and direct in the Ithaca, New York community, both on stage and in radio dramas. While on my final sabbatical leave before retirement I took a fling at off-off-Broadway performances of three plays while in New York City.

**Teaching, students, and advising.**—Acting and teaching go hand in hand. Dick took teaching seriously but perhaps in an unconventional way. In these days of PowerPoint presentations and flipped classrooms, one

can only imagine Dick's approach to teaching. He entered the classroom with some well-worn notes, but when he began the information spilled out, delivered in his wonderful deep voice. He was attuned to recent publications as well as the classical literature. Some of us remember in particular a detailed account of how to use the 26 volumes of Saccardo's Sylloge fungorum. He diagramed the volumes on the board. Which volumes contained which groups and where the cumulative indices fell became the stuff of misery. We would be given names to trace; Petrak's Lists bedeviled us. Saccardo aside, Dick's lectures were intricate and intriguing. For many years he taught a series of mycology courses that included an introductory course and separate courses on the so-called lower fungi, basidiomycetes, and ascomycetes/deuteromycetes. Each involved field trips and labs. The lab exercises were generally based on dried material and slides from the teaching collection (some of which dated from Fitzpatrick's time), but students were required to make their own collections and identify them. He would have students research topics he was particularly interested in, and, although we would often be left on our own, he enjoyed checking on our progress. Some of the reading material for the courses were carryovers from those Fitzpatrick had developed in a series of study notes, "Lectures on Mycology." They covered each of the major groups. Fitzpatrick published the first of the "Lectures" as the Lower Fungi in 1930, and he kept all the notes up to date as new findings were made and new ideas came along. In a tribute to Fitzpatrick, Dick continued to update the ascomycete notes until at least 1959. The mimeographed copies were used as a basis for his courses and were acknowledged as authored by Harry M. Fitzpatrick and Richard P. Korf. In later years he offered courses in introductory mycology and field mycology, plus a course tailored for graduate students in the Department of Plant Pathology. These courses stressed the field component and developed a devoted following. Students would leave his courses with the insight that indeed there was much to be done in the field of mycology. For his teaching, he earned the State University of New York Chancellor's Award for Excellence in Teaching in 1992 and Gamma Sigma Delta Teaching Award from the Cornell chapter in 1993.

Dick trained 21 Ph.D. students and several master's students. Seven of his students and postdoctoral fellows served as president of the Mycological Society of America. His students came from around the country and from around the world. They arrived with very different preparations and divergent social backgrounds. Somehow he managed this disparate group of conservatives and liberals, kids from the city and those from the country, those who were focused and those who struggled to find direction. In the lab or in the field, there was never any doubt that his students were his academic family.

Family.—Dick and his wife Kumi nurtured a handsome and creative family. Kumi is an architect and artist. Her works are included in public and private collections, including the Library of Congress, New York Public Library, Victoria and Albert Museum, Tate Library and Getty Center Research Library. She is the subject of an award-winning documentary, Hidden Books. There are four children. Mia is an actress. Ian, a bioinformatican, is an associate professor at University of California, Davis. Mario (Ian's twin) works in computer software as a content manager. Noni creates educational software. She has also made music videos with her daughter, Maïa Vidal, a highly original composer, songwriter, musician, and visual artist living in Barcelona.

A life well lived.—Richard Korf contributed to mycology in many ways. He spawned a lineage of students who have continued to expand knowledge of the discomycetes and other fungi; he inspired others to follow their dreams outside of mycology. His influence on fungal nomenclature continues with changes to the successive versions of the International Codes of Botanical Nomenclature, now International Code of Algae, Fungi and Plants. His novel ideas on publication have progressed with Mycotaxon, now online and in its 132nd volume. He enjoyed family and was committed to theatre and performance. We recognize these many accomplishments, but as those who were privileged to know Richard Korf, we will miss his joie de vivre, enthusiasm, humor, and forthright opinions.

## **ORCID**

Donald H. Pfister (b) http://orcid.org/0000-0002-9018-8646

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