

RYN MIAKE-LYE

Ryn Miake-Lye, PhD has been integrating innovative life sciences with results-oriented management for over 15 years. As the owner of ScienceDriven, Dr. Miake-Lye manages across organizations and partners with leadership to sort competing priorities and plan for the future. She has worked on projects that support the translation of research toward patient care for MGH Cancer Center, Partners Healthcare, Children's Hospital, Merck, and Novartis.

At Millennium Pharmaceuticals, Dr. Miake-Lye translated business strategy into R&D operations (1998-2002). As Program Director, she managed concurrent multi-project alliances in oncology. Then she identified metrics meaningful for discovery, which were consistent enterprise-wide yet compatible with rapid change. These were used in her design and implementation of a performance dashboard for the entire discovery pipeline, which was used by senior management. In 2001, she managed the Drug Development Infrastructure Initiatives from concept to launch. Prior to her work at Millennium, Dr. Miake-Lye helped to found the Department of Cell Biology at Harvard Medical School. As Director for Research and Administration (1993-1998), she was responsible for all phases of operational management for a new department of 30 faculty and 250 members, including recruitment and on-boarding of 7 new faculty, 60,000 sf laboratory space planning and renovation, and a 50% increase in grant volume. She has applied this experience more recently to help found the Wyss Institute for Biologically Inspired Engineering, SysCODE (Systems-based Consortium for Organ Design and Engineering) and help envision science and technology at Harvard University's Allston project. In 1989, Dr. Miake-Lye became reviews editor at *Cell* journal. With a commitment to interdisciplinary science, she shared responsibility for all decisions on research articles, and delivered at least two mini-reviews per biweekly issue.

Dr. Miake-Lye holds a B.Sc. with honors in biology from Caltech (1977). Upon graduation, she studied independently in Italy as a Thomas J. Watson fellow. She earned a Ph.D. in biochemistry from the University of California, San Francisco (UCSF; 1984) for a thesis entitled "Induction of Early Mitotic Events *in vivo* and *in vitro*". She returned to Caltech for postdoctoral research as a Senior Fellow of the American Cancer Society.

PUBLICATIONS

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CLIENT SUCCESS 1: STARTING UP DRUG DEVELOPMENT FROM SCRATCH

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| Problem | Biopharma Inc. needed to build its drug development organization <i>de novo</i> and immediately advance its product pipeline. The problem – in the view of the vice-presidents of the development areas – was going to be the lack of an infrastructure between and across individual areas. |
| Approach | The Interim Head of Drug Development led the Development Leadership team--the vice-presidents of clinical, regulatory, pre-clinical, quality/analytical, process technology, and project management—in the identification and prioritization of 15 Infrastructure Initiatives. |
| Actions | Ryn was responsible for cross-functional management to get each Infrastructure Initiative from concept to kick-off: shared executive sponsorship; approval of team-developed resource plans; weekly discussion of progress and issues by leadership team, followed up by Ryn. |
| Results | <ul style="list-style-type: none"> · Product pipeline advanced: 1st product to market kept to launch schedule; 3 NCEs entered clinic. · Coordinated growth: building of infrastructure tools, processes paced staffing up · Infrastructure planning informed decision-making about internal capabilities versus outsourcing |

CLIENT SUCCESS 2: DESIGNING A PERFORMANCE DASHBOARD FOR DISCOVERY

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| Problem | With multiple alliances for its platform technologies and six disease areas, TxDiscovery was successful and growing rapidly. But hallway conversations no longer answered management’s need to know, “how are we doing?” The problem – in senior management’s view – was that performance-management tools were designed for product sales and manufacturing, not drug discovery and development. |
| Approach | Design and track consistent metrics that are meaningful for discovery, yet compatible with rapid change. |
| Actions | Ryn conducted stakeholder analysis. Polled management team: what do you need to know? Polled discovery program directors: what are you trying to tell management? Ryn designed a prototype “dashboard” based on balanced scorecard principles: list of project timelines; top-line summary by program; progress against annual goals; staffing by project. |
| Results | <ul style="list-style-type: none"> · Fewer surprises using consistent, enterprise-wide metrics · With tracking and understanding of priorities, progress & substantive challenges were distinguished from “squeakiest wheel” · 100% effort from 1 human being >> 10% effort from 10 human beings. Improved efficiency and resource allocation resulted in better alignment with project prioritization. |

CLIENT SUCCESS 3: HIGH-PERFORMANCE STRATEGIC ALLIANCE MANAGEMENT

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| Problem | Simultaneous strategic alliances in oncology with two different pharmaceutical partners. The problem—in the view of senior management—was achieving: seamless coordination between the internal efforts for the two alliances, distinct separation of the deliverables and intellectual property for each alliance, <i>and</i> retaining value for the internal franchise. |
| Approach | Instead of silos with one leader for each alliance, the oncology research director shared leadership with the oncology <i>program</i> director, Ryn, who served the program as a cross-functional integrator. |
| Actions | <ul style="list-style-type: none"> · Priorities and experimental approaches negotiated proactively with alliance partner · Shared resources needed for execution of discovery plan secured in a timely manner · Productive relationships with collaborators, consultants and IP owners of in-licensed materials · Program status reported to management |
| Results | <ul style="list-style-type: none"> · All deliverables on target, on budget, on time. Specifically, 7 novel Candidate Genes, 4 Validated Targets for high-throughput screening delivered for one alliance. >50 Qualified Targets for cancer delivered in first 2 yrs of other alliance. · Disease area went from being the most fragmented, “last on the list” to one of two internal franchises |