

**Dr. Lalit M. Srivastava (1932-2012)**, was born in Gonda, India on 7 September 1932. He obtained his PhD at the University of California at Davis (1962) studying with Professor Katherine Esau, a distinguished plant anatomist, and undertook post-doctoral work at Harvard University (1962-65) with biologists Irving Widmer Bailey and Ralph Wetmore. He joined the Department of Biological Sciences at Simon Fraser University as a charter member in 1965. He was an authority on the molecular basis of the action of gibberellins and on the physiology, and biochemistry of the seaweeds.

### **Academic positions**

Assistant Professor, Simon Fraser University, 1965-1967  
Associate Professor, Simon Fraser University, 1967-1971  
Professor, Simon Fraser University, 1971-1998  
Professor Emeritus, Simon Fraser University, 1998-2012

Mercer Research Fellow, Harvard University 1961-1964  
Cabot Research Fellow, Harvard University 1964-1965  
Visiting Professor, Department of Botany, Univ. of Delhi, India 1967-1968 and 1977  
Visiting Professor, University of Cologne, Germany 1997

### **Administrative positions**

Acting Academic Vice-President 1969-1970  
Acting Dean, Faculty of Science, 1968  
Associate Dean, Faculty of Science, 1969  
Acting Chair, Department of Biological Sciences, 1984-1985  
Chair, Department of Biological Sciences 1985-1990  
President 1981-1988, Enmar Resources Corporation, Vancouver.  
President 1985-1989, Neoteric Food Technology, Ltd., Vancouver.  
Canadian Society of Cell Biology (Western Director); Association of Universities and Colleges of Canada (AUCC) Pre-selection Committee for Canadian Scholars going abroad; Governing Board (Chairman) and Board Committee on Faculty Contract Negotiations (Chairman), Capilano Community College; British Columbia Ministry of Education Management Advisory Council (Personnel Committee Chairman, Capital Facilities Committee); Pacific Section, Canadian Microscopical Society (Chairman); and Canadian Council of University Biology Chairmen (Executive Committee).

### **Invited speaker:**

India: Department of Botany, Delhi University; Punjab University, Chandigarh

Sri Lanka: University of Ceylon, Peradeniya

Germany: Botanical Institute, University of Cologne; NATO Advanced Study Institute, Bad Honnef

China: Institute of Oceanology, Qingdao

USA: University of Hawaii, Honolulu; Stanford University, Palo Alto, CA; University of California, Santa Cruz; Iowa State University, Ames; and Centennial Celebrations of the Arnold Arboretum, Harvard University, Boston, MA

Canada: University of Calgary, Alta.; NATO-supported Conference on Phloem Transport, Banff, Alta.; McGill University, Montreal, Que.; Pacific Forest Research Centre, Victoria, B.C.; and Department of Zoology, University of British Columbia, Vancouver

### **Reviewer**

Research proposals for U.S. National Science Foundation and NSERC.

Referee of manuscripts for American Journal of Botany, Botanical Gazette, Canadian Journal of Botany, Phytomorphology, Plant Physiology, Proceedings of the National Academy of Sciences, Protoplasma, and Wood Fiber.

### **Research Funding**

Funding from: Environment Canada; Canada Department of External Affairs; Science Council of British Columbia; British Columbia Ministry of the Environment; North Atlantic Treaty Organization (NATO); Simon Fraser President's Research Fund, and Programs of Excellence; and operating and equipment grants from NSERC.

### **Publications**

#### Books:

Srivastava, LM: Plant growth and development : hormones and environment. San Diego: CA : Academic Press (2002)

Srivastava, LM (ed). Synthetic and degradative processes in marine macrophytes : proceedings of a conference held at Bamfield Marine Station, Bamfield, Vancouver Island, British Columbia, May 16-18, 1980 / Berlin (1982)

Bilgrami, K. S.: Fundamentals of botany / K.S. Bilgrami, L.M. Srivastava, J.L. Shreemali. (J. L. Shreemali & Lalit M. Srivastava, Eds.). New Delhi : Vikas Publishing House (1979)

Srivastava, LM: Secondary phloem in the Pinaceae. Berkeley : University of California press (1963)

#### Book Chapters

Srivastava, L.M. 1964. Anatomy, chemistry and physiology of bark. in J.A. Romberger and P. Mikota (Eds.), International Review of Forestry Research 1 : 203-277. Academic Press, New York.

Aronoff, S., J. Dainty, P.R. Gorham, L.M. Srivastava, and C.A. Swanson (Eds.). 1975. NATO Advanced Study Institutes, Series A, Vol. 4. Plenum Press, New York.

Srivastava, L.M. 1975. Structure and differentiation of sieve elements in angiosperms and gymnosperms. *In*: S. Aronoff, J. Dainty, P.R. Gorham, L.M. Srivastava, and C.A. Swanson (Eds.), NATO Advanced Study Institutes, Series A, 4: 33-62. Plenum Press, New York.

Srivastava, L.M. (Ed.). 1982. Synthetic and Degradative Processes in Marine Macrophytes. 296 pp. Walter de Gruyter & Co., Berlin.

Yalpani, N. and L.M. Srivastava. 1987. Partial purification of a gibberellin binding protein from cucumber hypocotyls. *In*: J.E. Fox and M. Jacobs (Eds.), Molecular Biology of Plant Growth Control. pp. 309-314. Alan R. Liss, Inc., New York.

Liu, Z.-H. and L.M. Srivastava. 1987. *In vitro* binding of gibberellin A<sub>1</sub> in epicotyls of dwarf pea and tall pea. *In*: J.E. Fox and M. Jacobs (Eds.), Molecular Biology of Plant Growth Control. pp. 315-322. Alan R. Liss, Inc., New York.

Srivastava, L.M. 1987. The gibberellin receptor. *In*: D. Klambt (Ed.), Plant Hormone Receptors. NATO ASI Series, Vol. H10: 199-227. Springer-Verlag, Heidelberg.

Yalpani, N., Z.-H. Liu, and L.M. Srivastava. 1987. Extraction and assay of gibberellin-binding proteins from cucumber and pea. *In*: D. Klambt (Ed.), Plant Hormone Receptors. NATO ASI Series, Vol. H10: 285-280. Springer-Verlag, Heidelberg.

#### Refereed Journal Articles

Meng, JX, Srivastava, LM: Variations in Floridoside Content and Floridoside Phosphate Synthase, Activity in *Porphyra-Perforata* (Rhodophyta). *Journal of Phycology* 29, 82-84 (1993)

Sechley, KA, Srivastava, LM: Gibberellin-Enhanced Transcription By Isolated-Nuclei from Cucumber, Hypocotyls. *Physiologia Plantarum* 82, 543-550 (1991)

Meng, JX, Srivastava, LM: Partial-Purification and Characterization of Floridoside Phosphate Synthase from *Porphyra-Perforata*. *Phytochemistry* 30, 1763-1766 (1991)

Meng, JX, Srivastava, LM: Extraction, Assay and Some Properties of Floridoside Phosphate Synthase, from *Porphyra perforata* (Rhodophyta). *Journal of Phycology* 26, 683-688 (1990)

Srivastava, L.M. and K.A. Sechley. In Search of A Gibberellin Receptor. *J. Iowa Acad. Sci.* (1990)

Rosell, KG, Srivastava, LM: Fatty-Acids As Antimicrobial Substances in Brown-Algae. *Hydrobiologia* 151, 471-475 (1987)

Meng, J, Rosell, KG, Srivastava, LM: Chemical Characterization of Floridosides from *Porphyra Perforata*. *Carbohydrate Research* 161, 171-180 (1987)

Liu, ZH, Srivastava, LM: Invitro Binding of Gibberellin A4 in Epicotyls of Dwarf Pea and Tall Pea. *Journal of Cellular Biochemistry* 10b, 35-35 (1986)

Yalpani, N, Srivastava, LM: Partial-Purification of a Gibberellin Binding-Protein from Cucumber. *Journal of Cellular Biochemistry* 10b, 37-37 (1986)

Yalpani, N, Srivastava, LM: Competition For Invitro [H-3] Gibberellin A-4 Binding in Cucumber by Gibberellins and their Derivatives. *Plant Physiology* 79, 963-967 (1985)

Rosell, KG, Srivastava, LM: Seasonal-Variations in Total Nitrogen, Carbon and Amino-Acids In *Macrocystis integrifolia* (Phaeophyta). *Journal of Phycology* 21, 304-309 (1985)

Amat, MA, Srivastava, LM: Translocation of Iodine in *Laminaria saccharina* (Phaeophyta). *Journal of Phycology* 21, 330-333 (1985)

Wheeler, WN, Smith, RG, Srivastava, LM: Seasonal Photosynthetic Performance of *Nereocystis luetkeana*. *Canadian Journal of Botany-Revue Canadienne De Botanique* 62, 664-670 (1984)

Rosell, KG, Srivastava, LM: Seasonal-Variation in the Chemical-Constituents of the Brown-Algae, *Macrocystis integrifolia* and *Nereocystis luetkeana*. *Canadian Journal of Botany-Revue Canadienne De Botanique* 62, 2229-2236 (1984)

Rosell, KG, Srivastava, LM: Binding of Inorganic Elements To Kelp Residues. *Hydrobiologia* 116, 505-509 (1984)

Wheeler, WN, Srivastava, LM: Seasonal Nitrate Physiology of *Macrocystis integrifolia*. *Journal of Experimental Marine Biology and Ecology* 76, 35-50 (1984)

Shih, ML, Floch, JY, Srivastava, LM: Localization of C-14-Labeled Assimilates in Sieve Elements of, *Macrocystis integrifolia* by Histoautoradiography. *Canadian Journal of Botany-Revue Canadienne De Botanique* 61, 157-163 (1983)

Smith, RG, Wheeler, WN, Srivastava, LM: Seasonal Photosynthetic Performance of *Macrocystis integrifolia* (Phaeophyceae). *Journal of Phycology* 19, 352-359 (1983)

Keith, B, Brown, S, Srivastava, LM: *In vitro* Binding of Gibberellin A4 to Extracts of Cucumber Measured by Using DEAE-Cellulose Filters. *Proceedings of the National Academy of Sciences of the United States of America-Biological Sciences* 79, 1515-1519 (1982)

Keith, B, Srivastava, LM: the Biological-Activity of Ketogibberellin A1. *Canadian Journal of Botany-Revue Canadienne De Botanique* 59, 2173-2174 (1981)

Keith, B, Foster, NA, Bonnettemaker, M, Srivastava, LM: *In vitro* Gibberellin-A4 Binding To Extracts of Cucumber Hypocotyls. *Plant Physiology* 68, 344-348 (1981)

Schmitz, K, Srivastava, LM: Long-Distance Transport in *Macrocystis integrifolia*.3. Movement of Tho. *Plant Physiology* 66, 66-69 (1980)

Keith, B, Boal, R, Srivastava, LM: On the Uptake, Metabolism and Retention of [H-3]-Labeled Gibberellin-A1 by Barley Aleurone Layers at Low-Temperatures. *Plant Physiology* 66, 956-961 (1980)

Keith, B, Srivastava, LM: *In vivo* Binding of Gibberellin-A1 in Dwarf Pea Epicotyls. *Plant Physiology* 66, 962-967 (1980)

Keith, B, Srivastava, LM, Murofushi, N: Biological Activities of Some Iodinated Gibberellins. *Agricultural and Biological Chemistry* 43, 141-143 (1979)

Willenbrink, J, Kremer, BP, Schmitz, K, Srivastava, LM: Photosynthetic and Light-Independent Carbon Fixation in *Macrocystis*, *Nereocystis*, and Some Selected Pacific Laminariales. *Canadian Journal of Botany-Revue Canadienne De Botanique* 57, 890-897 (1979)

Schmitz, K, Srivastava, LM: Long-Distance Transport in *Macrocystis integrifolia* .1. Translocation of C-14-Labeled Assimilates. *Plant Physiology* 63, 995-1002 (1979)

Schmitz, K, Srivastava, LM: Long-Distance Transport in *Macrocystis-Integrifolia* .2. Tracer Experiments With C-14 and P-32. *Plant Physiology* 63, 1003-1009 (1979)

Keith, B, Srivastava, LM: Effects of Colchicine and Lumicolchicine On Hypocotyl Elongation, Respiration Rates and Microtubules in Gibberellic-Acid-Treated Lettuce, Seedlings. *Planta* 139, 301-303 (1978)

Sawhney, VK, Srivastava, LM: Comparative Effects of Cytochalasin-B and Colchicine On Lettuce, Seedlings. *Annals of Botany* 41, 271 (1977)

Srivastava, LM, Sawhney, VK, Bonnetmaker, M: Cell-Growth, Wall Deposition, and Correlated Fine-Structure of, Colchicine-Treated Lettuce Hypocotyl Cells. *Canadian Journal of Botany-Revue Canadienne De Botanique* 55, 902-917 (1977)

Sawhney, VK, Srivastava, LM, Morley, D: Inhibitors of RNA and Protein-Synthesis and Kinetics of Growth of Lettuce Hypocotyls Induced by Gibberellic-Acid. *Canadian Journal of Botany-Revue Canadienne De Botanique* 55, 1829-1837 (1977)

Schmitz, K, Srivastava, LM: Fine-Structure of Sieve Elements of *Nereocystis Lutkeana*. *American Journal of Botany* 63, 679-693 (1976)

Lai, V, Srivastava, LM: Nuclear Changes During Differentiation of Xylem Vessel Elements. *Cytobiologie* 12, 220-243 (1976)

Sawhney, VK, Srivastava, LM: Wall Fibrils and Microtubules in Normal and Gibberellic-Acid-Induced, Growth of Lettuce Hypocotyl Cells. *Canadian Journal of Botany-Revue Canadienne De Botanique* 53, 824-835 (1975)

Schmitz, K, Srivastava, LM: Fine-Structure of Sieve Tubes and Physiology of Assimilate Transport in *Alaria marginata*. *Canadian Journal of Botany-Revue Canadienne De Botanique* 53, 861-876 (1975)

Sawhney, VK, Srivastava, LM: Gibberellic-Acid Induced Elongation of Lettuce Hypocotyls and its Inhibition By Colchicine. *Canadian Journal of Botany-Revue Canadienne De Botanique* 52, 259 (1974)

Schmitz, K, Srivastava, LM: Fine-Structure and Development of Sieve Tubes in *Laminaria-Groenlandica*, Rosenv. *Cytobiologie* 10, 66-87 (1974)

Sawhney, VK, Srivastava, LM: Cytochalasin-B-Induced Inhibition of Root-Hair Growth in Lettuce, Seedlings and Its Reversal By Benzyladenine. *Planta* 119, 165-168 (1974)

Schmitz, K, Srivastava, LM: Enzymatic Incorporation of P-32 Into ATP and Other Organic Compounds By, Sieve-Tube Sap of *Macrocystis integrifolia* Bory. *Planta* 116, 85-89 (1974)

Shoemaker, EM, Srivastava, LM: Mechanics of Stomatal Opening in Corn (*Zea-Mays* L) Leaves. *Journal of Theoretical Biology* 42, 219 (1973)

Singh, AP, Srivastava, LM: Fine-Structure of Pea Stomata. *Protoplasma* 76, 61 (1973)

Singh, AP, Srivastava, LM: Fine-Structure of Corn Phloem. *Canadian Journal of Botany* 50, 839 (1972)

Srivastava, LM, Singh, AP: Certain Aspects of Xylem Differentiation in Corn. *Canadian Journal of Botany* 50, 1795 (1972)

Srivastava, LM, Vesk, M, Singh, AP: Effect of Chloramphenicol On Membrane Transformations in Plastids. *Canadian Journal of Botany* 49, 587 (1971)

Srivastava, LM: Secondary Phloem of *Austrobaileya scandens*. *Canadian Journal of Botany* 48, 341 (1970)

Srivastava, LM: On Ultrastructure of Cambium and Its Vascular Derivatives .3. Secondary Walls of Sieve Elements of *Pinus strobus*. *American Journal of Botany* 56, 354 (1969)

Paulson, RE, Srivastava, LM: Fine Structure of Embryo of *Lactuca sativa* .I. Dry Embryo. *Canadian Journal of Botany* 46, 1437 (1968)

Srivastava, LM, Paulson, RE: Fine Structure of Embryo of *Lactuca sativa* .2. Changes During Germination. *Canadian Journal of Botany* 46, 1447 (1968)

Srivastava, LM: Induction of Mitotic Abnormalities in Certain Genera of Tribe Vicieae By, Paradichlorobenzene. *Cytologia* 31, 166 (1966)

Srivastava, LM: On Fine Structure of Cambium of Fraxinus Americanal. *Journal of Cell Biology* 31, 79 (1966)

Srivastava, LM, Obrien, TP: On Ultrastructure of Cambium and Its Vascular Derivatives . I. Cambium of *Pinus strobus* L. *Protoplasma* 61, 257 (1966)

Srivastava, LM, Obrien, TP: On Ultrastructure of Cambium and Its Vascular Derivatives 2. Secondary Phloem of *Pinus strobus* L. *Protoplasma* 61, 277 (1966)

Srivastava, LM, Naithani, SP: Cytogenetical Studies in Certain Minor Pulses and Beans. *Cytologia* 29, 453 (1964)

Viswanathan, PN, Srivastava, LM: Search For Uridine Diphosphate Glucose-Starch Synthetase + Phosphorylas Activity in Polyfructosan Bearing Tissues. *Indian Journal of Biochemistry* 1, 133 (1964)

Srivastava, LM: Cytogenetical Studies in Certain Species of Vicia. *Cytologia* 28, 154-1963

Viswanathan, PN, Srivastava, LM, Krishnan, PS: Diurnal Variations in Some Enzymes of Carbohydrate Metabolism in Tapioca, Leaves. *Plant Physiology* 37, 283 (1962)

Translation:

Munshi Premchand: Karmabhoomi. Novel written in Hindi. Translated into English by LM Srivastava. Oxford University Press