

Name: Ralph Arnold LEWIN

Date and place of birth: 30 April 1921: London, England.

Married: 11 June 1950. Wife's name: Joyce Mary CHISMORE.

Children: none.

Education

- 1932-39 Kilburn Grammar School.
London Matriculation (10 subjects) 1937-38.
London University Inter. BSc. (Bot. Zool. Chem. Math.) 1939.
State Scholarship.
- 1939-41 Downing College Cambridge. College Exhibition 1940-41.
- 1946-47 Natural Science Tripos, Part I. (Bot. Zool. Chem. Biochem.)
First class honours 1941.
Natural Science Tripos, Part II. (Botany).
First class honours 1947.
- BA, 1942.
MA, 1946.
- 1947-51 Sir John Dill Fellowship (1947-48) at Yale University.
Hooker Fellowships, graduate assistantships, etc.
M.S. 1949.
PhD. 1950. Thesis: The life cycle and genetics of
Chlamydomonas moewusii Gerloff.
- Summer terms: 1948: Stanford University, Pacific Grove, Calif.
Marine algae - Prof. G.M. Smith.
Microbiology - Prof. C.B. van Niel.
1949: Marine Biological Laboratory, Woods Hole, Mass
Marine botany, and independent research.
1955: Lalor fellowship at M.B.L., Woods Hole, Mass.

Posts held

- 1942 Member of team of Marine Algae Survey of British Isles.
(Ministry of Supply)
- 1943 Assistant, Wood Pigeon Investigation.
(Bureau of Animal Population, Oxford.)
- 1943-46 Private, H.M. Forces (Army).
- 1950-51 Special lecturer, Botany Department, Yale University.
- 1951 (Long Vac. Term) Demonstrator, Botany School, Cambridge, G.B.
- 1951-52 Instructor, Botany Department, Yale University.
- 1952-55 Assistant Research Officer, National Research Council,
(Maritime Regional Laboratory), Halifax, N.S., Canada.
- 1953-55 Special lecturer, Biology Department, Dalhousie University,
Halifax, N.S. Canada.

Languages Speaking and writing knowledge of French, Italian, Esperanto.
Reading and some understanding of spoken German.

Societies Sigma Xi. Society for General Microbiology. Canadian
Society of Microbiologists. Phycological Society of America.

Special interests Microbiology, including microbial genetics.
Phycology and Mycology.
Plant physiology, especially of thallophytes.

Publications See attached list.

Publications

- Lewin, R.A. (Biological flora of the British Isles) *Sonchus L.*
J. Ecol. 36:203-23, 1948.
Gemmination of zygosporcs in *Chlamydomonas*.
Nature 164:543-54, 1949.
Gamete behaviour in *Chlamydomonas*.
Nature 166:76, 1950.
Induced vitamin-requiring mutants of *Chlamydomonas*.
Nature 166:196, 1950.
Isolation of sexual strains of *Chlamydomonas*.
J. Gen. Microbiol. 5:926-29, 1951.
Ultra-violet induced mutations in *C. moewusii* Gerloff.
J. Gen. Microbiol. 6:233-48, 1952.
The primary zygote membrane in *C. moewusii*.
J. Gen. Microbiol. 6:249-50, 1952.
Vitamin requirements in the Chlorococcales.
Phyc. Soc. Amer. Bull. 5:21-22, 1952.
Studies on the flagella of algae.
I. General observations on *C. moewusii* Gerloff.
Biol. Bull. 10:74-79, 1952.
II. Formation of flagella by *Chlamydomonas* in light
and darkness. Ann. N.Y. Acad. Sci. 56:1091-1093, 1953.
V. Mutants of *C. moewusii* with impaired motility.
J. Gen. Microbiol. 11:358-63, 1954.
Genetics of *C. moewusii* Gerloff.
Proc. 7th Int. Bot. Cong. (Stockholm) p.430, 1953.
The genetics of *C. moewusii* Gerloff.
J. Genetics 51:543-60, 1953.
A marine *Stichococcus* sp. which requires vitamin B₁₂.
J. Gen. Microbiol. 10:93-96, 1954.
Sex in unicellular algae.
In Wenrich, D.H. (Ed.) Sex in Microorganisms. A.A.A.S.
Symposium (Philadelphia) pp.100-133, 1954.
Utilization of acetate by wild-type and mutant *C. dysosmos*.
J. Gen. Microbiol. 11:459-71, 1954.
Culture of *Prasiola stipitata* Suhr.
Can. J. Bot. 32:5-10, 1955.
Lewin, R.A. & Meinhart, J.O. Studies on the flagella of algae. III.
Electron micrographs of *C. moewusii*.
Can. J. Bot. 31:711-17, 1953.
Mintz, R.H. & Lewin, R.A. Studies on the flagella of algae. IV.
Serology of paralyzed mutants of *Chlamydomonas*.
Can. J. Microbiol. 1:65-67, 1954.
Lewin, R.A., Owen, M.J. & Melnick, J.L. Cell wall structure in *Chlamydomonas*.
Exp. Cell Res. 2:708-10, 1951.
Lewin, R.A. & Mintz, R.H. Inhibitors of photosynthesis in *Chlamydomonas*.
Arch. Biochem. Biophys. 54:246-48, 1955.
Frenkel, A.W. & Lewin, R.A. Photoreduction by *Chlamydomonas*.
Amer. J. Bot. 41:586-89, 1954.

IN PRESS
Lewin, R.A. Flagella - problems and enigmas. In "New Biology # 19"
Published by Penguin Books Ltd.