
BIOGRAPHICAL SKETCH

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NAME Richard D. Feinman	POSITION TITLE Professor of Biochemistry
eRA COMMONS USER NAME (credential, e.g., agency login)	

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Rochester, Rochester, NY	B.S.	1963	Chemistry
University of Oregon, Eugene, OR	Ph.D.	1969	Chemistry

A. POSITIONS AND HONORS.

POSITIONS

Assistant Professor of Biochemistry	1972–1978	SUNY Downstate Medical Center, Brooklyn, NY
Associate Professor of Biochemistry	1978-1983	SUNY Downstate Medical Center, Brooklyn, NY
Professor of Biochemistry	1983– Present	SUNY Downstate Medical Center, Brooklyn, NY
Clinical Professor of Family Practice	2009– Present	SUNY Downstate Medical Center, Brooklyn, NY

HONORS: Recipient: NHLBI Research Career Development Award 1978-1983
Co-Editor-in-Chief, Nutrition & Metabolism 2004-2009

CONFERENCE ORGANIZER:

- 1983 New York Academy of Sciences - Chemistry and Biology of α_2 -Macroglobulin
- 1994 New York Academy of Sciences - Chemistry and Biology of α_2 -Macroglobulin
- 2004 Downstate-Kingsbrook - Nutritional and Metabolic Aspects of Low Carbohydrate Diets
- 2006 Nutrition & Metabolism Society - Nutritional and Metabolic Aspects of Carbohydrate Restriction

B. SELECTED PEER-REVIEWED PUBLICATIONS

1. Feinman, R.D. & Detwiler, T.C. (1974), **Platelet Secretion Induced by Divalent Cation Ionophores.** *Nature* **249**, 172-173.
2. Sachs, F. & Feinman, R.D. (1976) **Spin-Labelled Human Platelets.** *Thrombosis Research*, **8**, 43-52.
3. Charo, I.F., Feinman, R.D., & Detwiler, T.C. (1977), **Interrelations of Platelet Aggregation and Secretion.** *J. Clin. Invest.* **60**, 866-873.
4. Smith, J.B., Ingerman, C.M. & Silver, M.J. Charo, I.F., Feinman, R.D., & Detwiler, T.C. (1977), **Independent Induction of Platelet Aggregation and Secretion by Prostaglandin Endoperoxides and Thromboxane A2-Like Material.** *Nature* **269**, 66-69.

5. Wehner, J. M., Feinman, RD, and Sheppard, JR (1982) **β -Adrenergic Response in Mouse CNS Reaggregate Cultures.** *Developmental Brain Research* **3**, 207-217.
6. Wong, RF, Chang, T-L, and Feinman RD (1982) Reaction of Antithrombin with Proteases. The Nature of the Reaction with Trypsin. *Biochemistry* **21**, 6-12.
7. Wong, R.F., Windwer, S.R., and Feinman, R.D. (1983). **The Interaction of Thrombin and Antithrombin. Reaction observed by intrinsic fluorescence measurements.** *Biochemistry* **22**, 3994-3999.
8. Liu, D. F., Feinman, R.D. & Wang, D. (1987) **Evidence for Active Half-Molecules of α_2 -Macroglobulin Formed by Dissociation in Urea.** *Biochemistry*, **26**, 5221-5226.
9. Abramson, C.I. and Feinman, R.D. (1987) **Operant Punishment in the green crab, *Carcinus Maenas*.** *Behavioral and Neural Biology*, **48**, 259-277.
10. Abramson, C.I. and Feinman, R.D. (1988) **Classical Conditioning of the Eye Withdrawal Reflex in the Green Crab,** *J. Neuroscience*. **8**, 2908-2912.
11. Abramson, C. I., Armstrong, P. M., Feinman, R. A. and Feinman, R. D. (1988) **Signalled avoidance in the eye withdrawal reflex of the green crab.** *J. Exp. Anal. Behavior*. **50**, 483-492.
12. Chen, B. J., Yuan, A., Wang, D., and Feinman, R.D. (1990) **Effect of Methylamine on the Reaction of α_2 -Macroglobulin with Enzymes.** *Biochemistry* **29**, 3361-3365.
13. Abramson, C. I., & Feinman, R. D. (1990). **Lever Press Conditioning in the Crab.** *Physiol. & Behav.*, **48**, 267-272.
14. Chen, B. J., Wang, D., Yuan, A. I., & Feinman, R. D. (1992) **Structure of α_2 -Macroglobulin-Protease Complexes. Methylamine Competition Shows That Proteases Bridge Two Disulfide-Bonded Half-Molecules.** *Biochemistry* **31**, 8960-8966.
15. Essex DW, Miller, A, Swiatkowska M, Feinman RD. (1999) **Protein disulfide isomerase catalyzes the formation of disulfide-linked complexes of vitronectin with thrombin-antithrombin.** *Biochemistry* **38**:10398-10405.
16. Essex DW, Li M, Miller A, Feinman RD. (2001) **Protein disulfide isomerase and sulfhydryl-dependent pathways in platelet activation.** *Biochemistry* **40**(20): 6070-6075.
17. Feinman, R. D. (2001) **Ethanol Metabolism and the Transition from Organic chemistry to Biochemistry.** *J. Chem. Ed.* **78**, 1215-1220.
18. Feinman, R. D. & Makowske, M. (2003) **Metabolic Syndrome and Low Carbohydrate Ketogenic Diets in the Medical School Biochemistry Curriculum** *Metab Syndrome Reld Disorders* **1**, 189-197.
19. Feinman, R. D. & Fine, E. J. (2003) **Thermodynamics and Metabolic Advantage in Weight Loss Diets,** *Metabc Syndrome Rel Disorders* **1**, 209-219.
20. Fine EJ, Feinman RD: (2004) **Thermodynamics of weight loss diets.** *Nutr Metab (London)* **1**:15
21. Feinman RD, Fine EJ. (2004) **"A calorie is a calorie" violates the second law of thermodynamics.** *Nutrition J.* **3**:9.
22. Essex, D., Li, M., Feinman, R. D. & Miller, A. (2004) **Platelet Surface Glutathione Reductase-like Activity.** *Blood*, **104**, 1383-1385.
23. Feinman, RD (2004) **Oxidation-Reduction Calculations in the Biochemistry Course.** *Biochemistry and Molecular Biology Education* **32**, 61-65.
24. Volek JS, Feinman RD (2005) **Carbohydrate restriction improves the features of Metabolic Syndrome. Metabolic Syndrome may be defined by the response to carbohydrate restriction.** *Nutr Metab (Lond)* **2**:31.
25. Makowske M, Feinman RD (2005) **Nutrition education: a questionnaire for assessment and teaching.** *Nutr J*, **4**:2.
26. Feinman, RD, JS Volek (2006) **Low carbohydrate diets improve atherogenic dyslipidemia even in the absence of weight loss.** *Nutr Metab (Lond)*, **3**:24.
27. Feinman, RD, MC Vernon, EC Westman (2006) **Low carbohydrate diets in family practice: what can we learn from an internet-based support group.** *Nutr J* **5**:26.
28. Feinman, R, E Fine: (2007) **Nonequilibrium thermodynamics and energy efficiency in weight loss diets.** *Theoret Biol and Medical Models*,**4**:27.

29. Accurso A, Bernstein RK, Dahlqvist A, Draznin B, Feinman RD, Fine EJ, *et al.* (2008) **Dietary carbohydrate restriction in type 2 diabetes mellitus and metabolic syndrome: time for a critical appraisal.** *Nutr Metab (Lond)* **5**:9.
30. Forsythe, C, S Phinney, E Quann, R Wood, D Bibus, J Kraemer, R Feinman JS Volek (2008). **Comparison of low fat and low carbohydrate or fat on circulating fatty acid composition and markers of inflammation** *Lipids.*; **43**(1):65-77.
31. Volek JS, Fernandez ML, Feinman RD, Phinney SD (2008) **Dietary carbohydrate restriction induces a unique metabolic state positively affecting atherogenic dyslipidemia, fatty acid partitioning, and metabolic syndrome.** *Prog Lipid Res.*, **47**:307-318.
32. Feinman RD, Fine EJ, Volek JS (2008): **Analysis of dietary interventions. A simple payoff matrix for display of comparative dietary trials.** *Nutr J*, **7**:24.
33. Feinman RD (2009) **Intention-to-treat. What is the question?** *Nutr Metab (Lond)*, **6**:1.
34. Volek JS, Phinney SD, Forsythe CE, Quann EE, Wood RJ, Puglisi MJ, Kraemer WJ, Bibus DM, Fernandez ML, Feinman RD (2009): **Carbohydrate restriction has a more favorable impact on the metabolic syndrome than a low fat diet.** *Lipids*, **44**:297-309.
35. Fine EJ, Miller, A, Quadros, EV, Sequeira, JM, Feinman, RD (2009) **Acetoacetate reduces growth and ATP concentration in cancer cell lines which overexpress uncoupling protein-2.** *Cancer Cell International*, **9**:14.

C. Current Research

Multiple Sponsors. **Macronutrient Effects of Diets** 2004 – current

Role: PI

Pilot studies with C57/Bl6 mice to assess the effects of diet composition. Cell culture studies of cancer cell lines with ketone bodies as tissue culture model of diet cancer therapy.

Sponsor: The Veronica and Robert C Atkins Foundation

A Pilot Feasibility Study of a Low Carbohydrate Diet in Patients with Advanced Cancer

Eugene J. Fine, PI 2/21/06- 3/10/10

Role: Investigator

The goal is to assess feasibility of a carbohydrate restricted one month diet in 12 patients with advanced cancer and not taking concurrent chemotherapy, using PET scanning with F-18 Fluorodeoxyglucose as a surrogate marker for possible efficacy.