

Rothamsted Repository Download

G - Articles in popular magazines and other technical publications

Theodoulou, F. L. 2017. *You've never had it so good (in the lab)*. Portland Press Ltd. doi:10.1042/BIO03904003

The publisher's version can be accessed at:

- <https://dx.doi.org/10.1042/BIO03904003>

The output can be accessed at: <https://repository.rothamsted.ac.uk/item/96z44/you-ve-never-had-it-so-good-in-the-lab>.

© 1 August 2017, Portland Press Ltd.

For advertising and inserts contact:

Marketing Department
 Biochemical Society
 Charles Darwin House
 12 Roger Street
 London WC1N 2JU
 tel.: +44 (0) 20 7685 2411; fax: +44 (0) 20 7685 2469
 email: marketing@biochemistry.org

Production by Portland Press Limited

Editor: Helen Albert

Typesetting and layout: Rowena Weedon

Design by Peter Jones

Printed by Cambrian Printers Ltd, Aberystwyth

Published by Portland Press Limited six times a year
 (February, April, June, August, October and December).

©2017 Biochemical Society

ISSN 0954-982X (Print); ISSN 1740-1194 (Online)

Charles Darwin House
 12 Roger Street
 London WC1N 2JU
 tel.: 020 7685 2410
 email: biochemist@biochemistry.org
 website: www.biochemist.org
 Registered charity no. 253894

Subscriptions

email: licensing@portlandpress.com

Science Editor: Freddie Theodoulou (Rothamsted Research, UK)

Editorial Panel: Rob Beynon, Sheila Graham, David Pye, Nicola Gray, Fraser MacMillan and Chris Willmott

The Editors are pleased to consider items submitted by Society members for publication. Opinions expressed in signed articles are not necessarily those of the Society.

US agent: Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11431, USA

*Periodicals postage paid at Jamaica, NY 11431, USA.
 Postmaster: address corrections to The Biochemist,
 Air Business Ltd, c/o Worldnet Shipping Inc., 156-15,
 146th Avenue, 2nd Floor, Jamaica, NY 11431, USA*



Find us on Facebook at [Biochemical Society](#)



Follow us on Twitter @[The_Biochemist](#)

You've never had it so good (in the lab)

by Freddie Theodoulou, Science Editor



The first day that I was let loose in a real research lab to do an undergraduate project, I was fascinated to find a big folder filled with yellowing sheets of methods propped up against the freezer. Turning the first page, my eye was immediately drawn to 'Preparation of ATP from autoclaved yeast', filed under 'A'. I never made it through to Z because the idea of having to isolate what seemed to me to be a very everyday reagent, before even thinking of doing an experiment, was quite a shock. Now we just flick through the Sigma catalogue for this sort of thing, but of course someone, somewhere has spent time extracting or synthesizing it.

This anecdote calls to mind what has become an informal scientific sport, where seasoned members of our lab compete to celebrate 'old-school' methodology and alarm students with stories of alleged hardship at the bench. A newbie moaning that Stores has run out of DNA miniprep kits will inevitably be regaled with colourfully exaggerated tales of caesium chloride gradients that had to be run for days, industrial quantities of ethidium bromide and – for the more gullible audience – recklessly unbalanced centrifuge rotors careening across the room. References to time-saving technology often provoke a Pythonesque monologue: "In my day (assume gritty Northern accent at this point) we had to pour our own thin-layer chromatography plates/make our own dideoxys/mouth-pipette acrylamide/synthesize fifty millicuries-worth of radiotracers, all before breakfast!" (delete as applicable). I didn't have to pour my own thin-layer chromatography plates for that first summer project but I did have to walk down the road with an old plastic bread bin, to collect them from the organic chemistry department. I remember feeling rather proud that I was a proper scientist at last.

Only last week, I caught myself slipping into 'you've never had it so good' mode. Discussing genotyping EMS mutants by sequencing, I couldn't resist remarking to my colleague that he could now sequence a genome in a fraction of the time that it took me to get three good reads for each strand of the first gene that I cloned back in 1995. This is all good clean fun but these anecdotes imply not only that toiling at the coalface of biochemistry is an honourable thing (which of course it is), but also that we somehow look down on those for whom advances in technology has removed much of the laboratory drudgery that dominated our early research experiences. But making life easier in the lab is a good thing! Moreover, we now expect much more of our PhD students in the three years that they spend at the bench, especially if they hope to publish in good journals. Almost every issue of *The Biochemist* features examples of how new methods and machines have allowed us to push the boundaries of resolution, to progress more rapidly, to ask different, bigger questions and (maybe) spend less time in the cold room. I, for one, am all for that. ■