This article reprinted from:

Ketcham, R. 2006. A virtual tool for introducing students to the compound microscope. Page 381, *in* Tested Studies for Laboratory Teaching, Volume 27 (M.A. O'Donnell, Editor). Proceedings of the 27th Workshop/Conference of the Association for Biology Laboratory Education (ABLE), 383 pages.

Compilation copyright © 2006 by the Association for Biology Laboratory Education (ABLE) ISBN 1-890444-09-X

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the copyright owner. Use solely at one's own institution with no intent for profit is excluded from the preceding copyright restriction, unless otherwise noted on the copyright notice of the individual chapter in this volume. Proper credit to this publication must be included in your laboratory outline for each use; a sample citation is given above. Upon obtaining permission or with the "sole use at one's own institution" exclusion, ABLE strongly encourages individuals to use the exercises in this proceedings volume in their teaching program.

Although the laboratory exercises in this proceedings volume have been tested and due consideration has been given to safety, individuals performing these exercises must assume all responsibilities for risk. The Association for Biology Laboratory Education (ABLE) disclaims any liability with regards to safety in connection with the use of the exercises in this volume.

The focus of ABLE is to improve the undergraduate biology laboratory experience by promoting the development and dissemination of interesting, innovative, and reliable laboratory exercises.

Visit ABLE on the Web at: <u>http://www.ableweb.org</u>



A Virtual Tool for Introducing Students to the Compound Microscope

Robert Ketcham

University of Delaware, Dept. of Biology Newark, DE 19716

Abstract

Students who succeed in finding a specimen the first time they use a compound microscope usually become engrossed in observing detail never before available to them. Students who do not find a specimen during their first attempts often become frustrated and give up after a short while, and may never again make a serious attempt to use a microscope. Even though lab manuals for Introductory Biology provide clear stepwise directions for setting up the specimen and the microscope so that success is certain, the initial use of the compound microscope continues to be a problem for instructors who teach at this level. We thought that digital technology could effectively supplement oral and written directions, so we developed a virtual microscope as a teaching tool. It is currently available at <u>www.udel/scope</u>. Using it requires no fees or registration. Our interest now is in letting teachers know that the virtual microscope is available.