minipc bio T



minipcr bio "

We are miniPCR bio™

We make tools for scientists.

Whether you are holding a micropipette for the first time or defining the cutting edge of research, doing science requires high-quality innovative solutions. From classrooms to the International Space Station, our team of molecular biologists, designers, and educators is dedicated to the mission of making science accessible to everyone, everywhere.







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Prices are subject to change without notice and do not include sales tax or shipping charges. Visit our website for up-to-date pricing and promotional discounts.

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miniPCRTM thermal cyclers

miniPCR™ thermal cyclers are simple and intuitive for the classroom, small and durable for the field, and precise and sophisticated for the molecular biology lab user. miniPCR™ is the trusted name that revolutionized access to molecular biology.



SIMPLE

easy to use, intuitive software



DURABLE

withstands classroom and field use



PORTABLE

weighs under a pound and fits in the palm of your hand



RELIABLE

published, peer-reviewed results



AFFORDABLE

PCR on your budget





QP-1000-01 QP-1000-10 - 5-unit bundle

Meet the original mini8 thermal cycler. A personalized PCR experience for maximum engagement, with proven, published performance. Built to last, from classroom to jungle.



mini8 rainbow

QP-1000-75 - ocean blue QP-1000-76 - sunrise amber QP-1000-77 - neon green QP-1000-78 - pink power

QP-1000-79 - 5-unit bundle

Brighten up your lab with a miniPCR™ rainbow. Same classic transparent design, just in colors, because why not?



mini16 thermal cycler

QP-1016-01 QP-1016-10 - 5-unit bundle

mini16, twice the capacity in the same footprint. We've also added wireless connectivity, and, with Flex programming, enjoy virtually unlimited programming options including touchdown PCR.

	mini8	mini16
Number of samples	8	16
Compatible with all standard PCR reagents and consumables	•	•
Heated lid	•	•
Compatible with 8-tube strips	•	•
Universal power supply	•	•
Mac, PC, and Android compatible	•	•
Chromebook compatible	•	
iOS (iPhone and iPad) compatible		•
USB connectivity	•	•
Bluetooth connectivity		•
2-year warranty	•	•

miniPCR™ apps

Apps are available as a free download from the app store or at our website: minipcr.com/downloads

YOUR PCR ON YOUR DEVICE











Whether you are new to PCR or a seasoned gene jockey, you'll appreciate the ease of use and functionality of well thought-out design.

With the miniPCR™ app, programming is simple and intuitive.

- > Use your own device
- > Program in seconds
- > Monitor reactions in real time
- > Connect to multiple machines simultaneously
- > Store unlimited programs

Whatever device you work with, miniPCR™ thermal cyclers work with you.

	mini8	mini16
Mac	•	•
PC	•	•
Android	•	•
iOS (iPad and iPhone)		•
Chromebook	•	
USB connectivity	•	•
Bluetooth connectivity		•



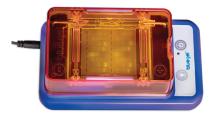
Empower your students

For new users, unique features make PCR accessible with temperature conditions graphed in real time, animated depictions of what is occurring at the molecular level, and a graph showing the estimated number of DNA copies.

blueGel™ electrophoresis & visualization system

blueGel™ is compact, durable, and easy to use. By integrating gel electrophoresis and blue light transillumination into an all-in-one device, you can see results instantly while still running your gel. There is no need for a separate imaging system, time-consuming staining and destaining, or harmful ethidium bromide and UV light.









blueGel™ electrophoresis with built-in transilluminator

QP-1500-01 QP-1500-50 - 5-unit bundle QP-1500-20 - 10-unit bundle

- · Fast results
- · Real-time DNA visualization
- · Error-proof casting and running
- · Integrated power supply
- · Safe DNA staining (e.g. GelGreen®)
- · Compatible with standard reagents



Fold-a-View™ photo documentation hood

Included with blueGel™ electrophoresis and visualization system

Pop-up this portable, foldable darkroom, place it on the blueGel™ cover, and snap perfect images with your cell phone or digital camera.



Introducing blueGel™ Tabs

Preweighed agarose tablets make pouring gels easier than ever.

Pack of 10 - RG-1500-03 Pack of 50 - RG-1500-05

- · Convenient tablet format—no messy weighing required
- · Fast dissolving protocol—gels ready to pour in seconds
- · Enhanced resolution and reduced background
- · Stable for 3 years at room temperature

GELATO

Electrophoresis for scientists with great taste™



A full-sized, integrated system for ultra-fast runs and eye-popping bands. Publication-quality results in a compact, space-saving footprint.

QP-1600-01 | Special launch price

- · Integrated transilluminator
- · Direct gel documentation
- · Built-in power supply up to 135V
- · Safe band cutting
- · Seamless casting platform

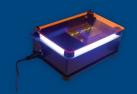


	blueGel™	Gelato™
Gel size	6 x 6 cm	12 cm x 6 cm (or two 6 cm x 6 cm)
Voltage	fixed	variable 50-135V
Number of samples	up to 26	up to 50
Built-in transillumination	1 •	•
Fold-a-View™ imaging h	ood •	•
Multichannel compatible)	•
Cutting tray		•
Timer		•

blueBox™ blue light transilluminators

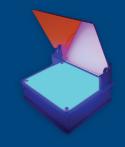
Visualize DNA safely and efficiently with high sensitivity. Say goodbye to ethidium bromide and harmful UV light! Compatible with major dyes such as GelGreen®, SYBR® Green, SYBR® Safe, GreenView™, GreenView™ Plus, EvaGreen®, GR Safe, Gel Star™, SYPRO® Ruby, and others.

	blueBox™ S	blueBox™ Pro
Viewing area	9 cm x 10 cm	14 cm x 11.4 cm
Compatible with SYBR® family green DNA stains	•	•
Includes Fold-a-View™ imaging hood	•	•
Integrated hinged lid	•	•
Lock-and-cut hinge for easy be cutting and gel excision	oand	•



blueBox™ S transilluminator with imaging hood

QP-1700-01



blueBox™ Pro transilluminator with imaging hood

QP-1700-03



Fold-a-View[™] photo documentation hood

Included with blueBox™ transilluminators

Foldable dark room allows you to take high quality gel images with your cell phone.



Micropipettes · H-style

Durable, quality, everyday performance.

See table - single H-style micropipette QP-1001-04 - set of 3 H-Style micropipettes

- · Accurate and durable
- · Fully adjustable
- · Ergonomic design
- · Compatible with standard tips
- · Calibration tool included

Model	Volume range (μl)	Catalog No.
H10	0.5 - 10	QP-1001-05
H20	2 - 20	QP-1001-01
H200	20 - 200	QP-1001-03
H1000	100 - 1000	QP-1001-02



Micropipettes · A-style

Designed for the pros.

See table - single A-style micropipette QP-1001-04 - set of 4 A-Style micropipettes

- · Advanced ergonomic design
- · 4-digit volume adjustment
- · Very low operating force
- · Compatible with standard tips
- · Calibration tool included

Model	Volume range (µl)	Catalog No.
A10	0.5 - 10	QP-1002-05
A20	2 - 20	QP-1002-01
A200	20 - 200	QP-1002-03
A1000	100 - 1000	QP-1002-02



Rack for 9 miniPCR™ micropipettes

QP-1001-06 - for H-style micropipettes
QP-1002-06 - for A-style micropipettes
QP-1001-07 - set of 4 H-style micropipettes with rack
QP-1002-07 - set of 4 A-style micropipettes with rack

- · Rotating design
- · Holds pipettes by the top, minimizing cross-contamination







This basic microcentrifuge will get you spinning fast.

QP-1000-01

- · Single speed 10,000 rpm
- · Robust and user-friendly



Gyro™ Plus microcentrifuge

Take our yellow submarine for a spin!

QP-1800-02

- · Variable speed up to 12,000 rpm
- · User-friendly LED interface

	Gyro™	Gyro Plus™
Speed (RPM)	10,000	1,000 to 12,000
Maximum RCF	4,800	6,900
6 x 1.5 ml microtube rotor	•	•
16 x 0.2 ml PCR tube rotor	•	•
6 adapters for 0.5 ml tubes	•	•



Lab in a Box #1

For the modern genomics road warrior.

LB-1000-04 - with mini8 thermal cycler LB-1016-04 - with mini16 thermal cycler

- · miniPCR™ mini8 or mini16 thermal cycler
- · Universal power adapter (90-264V)
- · miniPCR™ Power Pack, Li-ion 20,000 mAh (3+ hour of PCR cycling time)
- · AC Charger for miniPCR™ Power Pack
- · USB OTG adapter for Android devices
- · Space for a nanopore sequencer (sequencer not included)
- · Fieldable carrying case with protective foam inserts



miniPCR™ Power Pack, 20,000 mAh Li-ion battery

Take your PCR to the field, wherever that may be.

QP-1000-13

- \cdot 4 hours of PCR cycling time with mini8 thermal cycler
- \cdot 3 hours of PCR cycling time with mini16 thermal cycler
- · AC charger
- · Protective carrying pouch
- · Universal pins to charge other devices



Lab in a Box #2

PCR and electrophoresis, ready to go.

LB-2500-05 - with mini8 thermal cycler LB-2516-05 - with mini16 thermal cycler

- · miniPCR™ mini8 or mini16 thermal cycler
- · blueGel™ electrophoresis system with integrated transilluminator
- \cdot Set of 3 micropipettes, 1-10 µl, 2-20 µl, 20-200 µl
- \cdot 4 racks of 96 micropipette tips: 2 x 0.5-10 μ l, 2 x 2-200 μ l
- · Fieldable carrying case with protective foam inserts



Lab in a Box #4

A biotech classroom on wheels.

LB-5000-04 - with mini8 thermal cyclers LB-5016-04 - with mini16 thermal cyclers

- · 4 miniPCR™ mini8 or mini16 thermal cyclers
- \cdot 4 blueGel $^{\scriptscriptstyle{\text{TM}}}$ electrophoresis systems with integrated transilluminator
- · 8 micropipettes, 2-20 μl
- \cdot 1 micropipette, 20-200 μ l
- · 1 micropipette, 1-10 μl
- \cdot Rugged and fieldable carrying case with protective foam inserts (24" x 17" x 10")



miniPCR DNA Discovery System™

The essential biotech toolkit for your lab or classroom.

QP-2000-01 - with mini8 thermal cycler QP-2016-01 - with mini16 thermal cycler QP-2000-05 - 5-unit bundle with mini8

- · miniPCR™ mini8 or mini16 thermal cycler
- · blueGel™ electrophoresis system with integrated transilluminator
- · 2-20 µl micropipette





miniPCR DNA Discovery System™ Pro

Your premium DNA analysis toolkit.

QP-2020-01

- · miniPCR™ mini16 thermal cycler
- $\cdot \; \mathsf{Gelato}^{\scriptscriptstyle\mathsf{TM}} \; \mathsf{electrophoresis} \; \mathsf{and} \; \mathsf{visualization} \; \mathsf{system}$

miniPCR[™] Classroom Packs

Take the guesswork out of setting up your classroom. miniPCR $^{\text{TM}}$ Classroom Packs make ordering a breeze.



	miniPCR™ Starter Classroom Pack	miniPCR™ Biotech Classroom Pack	miniPCR™ Premium Classroom Pack
	QP-2500-10	QP-2500-20	QP-2500-30
miniPCR™ thermal cyclers	2 mini16	4 mini8	8 mini8
blueGel™ electrophoresis systems	4	8	8
Microcentrifuge	1 Gуго™	2 буго™	2 Gyro™ Plus
Student micropipettes	4 H2O	8 H2O	16 H2O
Teacher pipette set	1 H10 1 H20 1 H200	1 H10 1 H20 1 H200	1 H10 1 H20 1 H200 1 H1000
Micropipette stand	-	-	2
200 μl tips	4 racks	8 racks	16 racks
10 μl tips	2 racks	2 racks	2 racks
1000 μl tips	-	-	2 racks
	\$ 2990	\$ 4990	\$ 7990



miniPCR™ Lab Starter Pack

Get your lab up and running.

QP-2500-01 - with mini8 thermal cycler QP-2516-01 - with mini16 thermal cycler

- · miniPCR™ mini8 or mini16 thermal cycler
- · blueGel™ electrophoresis system with integrated transilluminator
- · 3 micropipettes: 1-10 μl, 2-20 μl, 20-200 μl
- · Consumables:
 - Agarose, electrophoresis grade, 20 g
 - 20X TBE electrophoresis buffer, 250 ml
 - GelGreen[™] DNA gel stain, 10,000X in water, 200 μ l
 - Microtubes 1.5 ml, bag of 500
 - PCR tubes 0.2 ml, bag of 100
 - 200 μl micropipette tips, 2 racks of 96
 - 10 μ l micropipette tips, 2 racks of 96

miniPCR™ Lab Starter Pack Plus

Add a Gyro™ Plus.

QP-2500-02 - with mini8 thermal cycler QP-2516-02 - with mini16 thermal cycler

- · miniPCR™ mini8 or mini16 thermal cycler
- · blueGel™ electrophoresis system with integrated transilluminator
- · 3 micropipettes: 1-10 μl, 2-20 μl, 20-200 μl
- · Gyro™ Plus microcentrifuge
- · Consumables:
 - Agarose, electrophoresis grade, 20 g
 - 20X TBE electrophoresis buffer, 250 ml
- GelGreen™ DNA gel stain, 10,000X in water, 200 μl
- Microtubes 1.5 ml, bag of 500
- PCR tubes 0.2 ml, bag of 100
- 200 μl micropipette tips, 2 racks of 96
- $10 \mu l$ micropipette tips, 2 racks of 96

"Our vision: scientists connecting at all levels, from high schools to cutting-edge laboratories."





PCR		Catalog No.
EZ PCR Master Mix, 5X	240 ul	RG-1000-01
Hot Multiplex PCR Master Mix, 5X	1 ml	RG-1010-01
Nuclease-free water	1 ml ultra-pure, DNase/RNase free	RG-1021-01
X-Tract™ DNA extraction buffer	1 ml	RG-1020-01



DNA ladder		Catalog No.
50 bp ladder	500 μl, Load Ready™	RG-1002-02
100 bp ladder	100 µl, Load Ready™	RG-1001-01
100 bp ladder	500 µl, Load Ready™	RG-1001-02
1 kb ladder	500 µl, Load Ready™	RG-1002-01



Tubes		Catalog No.
1.7 ml microtubes	Bag of 500	CM-1000-03
0.2 ml PCR tubes, thin walled	Bag of 100	CM-1000-01



Micropipette tips		Catalog No.
10 μ l micropipette tips	2 racks of 96 tips	CM-1001-05
200 µl micropipette tips	2 racks of 96 tips	CM-1001-01
1000 µl micropipette tips	2 racks of 100 tips	CM-1001-03



Learning Lab Companion Kit Catalo		
Lab companion kit	All tubes, agarose, buffer, and DNA stain needed for one PCR and electrophoresis-based miniPCR bio™ Learning Lab	KT-1510-01



Electrophoresis reagents	Catalog No.	
blueGel™ starter kit	Reagents for 100 1% gels: agarose, TBE, and GelGreen®	RG-1510-01
20X TBE electrophoresis buffer	250 ml stock solution	RG-1502-02
Agarose	20 g electrophoresis grade	RG-1500-02
GelGreen® nucleic acid gel stain	200 _ب ال, 10,000X stain	RG-1550-01
blueGel™ Tabs	10 pre-weighed agarose tablets	RG-1500-03
blueGel™ Tabs	50 pre-weighed agarose tablets	RG-1500-05

miniPCR bio Learning Labs™

Innovative activities for innovative minds

Written by veteran educators and PhD scientists, miniPCR bio Learning Labs™ take novel approaches to fundamental concepts while challenging learners at all levels.

Our affordable kits provide enough reagents for 8 lab groups or 32 students. View user guides and other free classroom resources at minipcr.com/educational-resources.



High-quality curriculum

Unique approaches

Relevant topics

Promoting inquiry

Key skills development

Would you like to discuss how to best implement our labs in your classroom?
Our curriculum team will provide the support you need to give your students the experience they deserve.

Email support@minipcr.com Call +1 781-990-8727



Micropipetting 101

KT-1510-10

Practice pipetting with reusable practice cards and gels. Kit includes 20 pipetting practice cards, 10 reusable silicone practice gels, practice dye, tips, and tubes.

Introductory Micropipetting



Electrophoresis Rainbow Lab

KT-1501-01

Separate common food dyes using gel electrophoresis and paper chromatography. Introduce students to key concepts and lab techniques.

Introductory

Gel electrophoresis, paper chromatography, micropipetting



Shark Attack Lab

KT-1500-03

Shark attacks have been menacing Australian beaches. Use DNA fingerprinting to understand the source of the attacks.

Introductory

Gel electrophoresis, micropipetting



Sickle Cell Genetics Lab: Diagnosing Baby Marie™

KT-1502-01

Students are presented with a fictional family's medical history and must work to make a genetic diagnosis for possible sickle cell disease.

Introductory through advanced Gel electrophoresis, micropipetting



Crime Lab: Missy Baker Missing™

KT-1000-03

Help find Missy Baker! In the process, learn about the connections between genes and disease, personal identification, and the use of biotechnology for genetic analysis.

Introductory through intermediate

PCR, gel electrophoresis, micropipetting



Antibiotic Resistance Lab: Monitoring Resistant Organisms in the Environment KT-1010-01

Students must establish whether farms are at risk from antibiotic-resistant bacteria that are spreading in the environment.

Introductory through advanced

PCR, gel electrophoresis, micropipetting



Forensics Lab: Analysis of the D1S80 VNTR

KT-1009-01

Students must rule themselves out as a suspect! Use your own DNA to explore concepts of inheritance, DNA polymorphism, genetic diversity, and forensic analysis.

Introductory through advanced

PCR, gel electrophoresis, DNA extraction



Plant Genetics Lab: Taking Mendel Molecular with Wisconsin Fast Plants®

KT-1011-01

Investigate the genotypic basis of a phenotype using Wisconsin Fast Plants®. Link purple or green stem color to its underlying genetic cause.

Intermediate through advanced

PCR, gel electrophoresis, DNA extraction



GMO Detection Lab

KT-1003-01

Fast and robust PCR-based GMO detection from your favorite foods. Engage in a real-world biotechnology application relevant to agriculture, environmental science, and the food industry.

Introductory through advanced

PCR, gel electrophoresis, DNA extraction



miniPCR Sleep Lab™

KT-1005-01

Participate in an authentic investigation on the genetics of sleep. Users determine their own genotype at a locus that has been associated with morning vs. evening preference.

Intermediate through advanced PCR, gel electrophoresis, DNA extraction



Food Safety Lab: Mars Colony at Risk!

KT-1001-03

Help astronauts control an outbreak of pathogenic bacteria in space food bound for Mars! Characterize bacterial strains and protect the health of astronauts.

Introductory through advanced

PCR, gel electrophoresis, restriction digest



Genotype to Phenotype: PTC Taster Lab

KT-1004-03

Examine how genetic variations affect our ability to perceive the world around us. Use molecular techniques to determine whether you carry taster or non-taster alleles.

Introductory through advanced

PCR, gel electrophoresis, restriction digest, DNA extraction





D∩Adots™

DNAdots[™] are bite-sized, simple explanations of modern genetic technologies.

DNAdots[™] are freely available to anyone who wants to learn more about current biology and DNA science.

Each DNAdots™ article covers a new topic, such as CRISPR/CAS9 or Next Generation Sequencing, in just two pages using non-technical language. DNAdots™ articles can be used to build up your own knowledge or to introduce cutting-edge topics into the classroom.

Use the associated study questions as part of a homework assignment or assign them to students as a jumping off point to further research.

dnadots.minipcr.com

Explore DNAdots:

Personal Genetic Ancestry Testing

Droplet Digital PCR

RNA Interference (RNAi)

Cancer Immunotherapy

Genetically Modified Organisms (GMOs)

and many more!



P51.

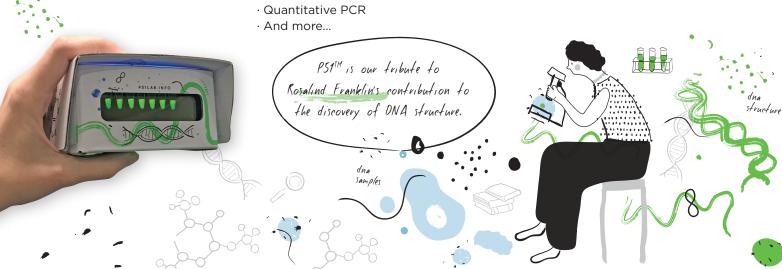
P51™ Molecular Glow Labs™

A whole new approach to biology inquiry in the classroom using fluorescence.

Discover a completely new approach to studying biological structures, functions, and processes. Fluorescent outputs give students fast visual results in labs that tackle key areas across the biology curriculum. Introduce authentic hands-on investigations where previously worksheets and paper models were the norm. Make biology glow[™]!

Investigate:

- · DNA structure
- · Enzyme activity
- · Transcription and translation

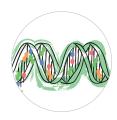




P51™ Molecular Fluorescence Viewer

QP-1900-01 QP-1900-08 - set of 8

This small, battery-operated, handheld blue-light illumination system opens the world of fluorescence to your students.



DNA Glow Lab™: Exploring DNA Structure

KT-1900-01

Investigate how DNA sequence, temperature, and pH interact with the double helix. Move beyond paper models and investigate DNA structure directly!

Introductory through advanced



Enzyme Lab: β-Gal Glow™

KT-1900-02

Use an inquiry-based approach to investigate enzyme activity. Measure the effect of pH, temperature, concentration, and competitive inhibition on enzyme reaction rates.

Intermediate through advanced

qPCR Lab: Principles of Quantitative PCR

KT-1900-05

Students will directly visualize amplification of DNA and will be able to calculate relative concentrations of DNA template. Explore qPCR using your existing PCR machine!

Intermediate through advanced

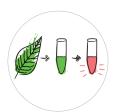


Introduction to Fluorescence Lab: Glow Big or Glow Home

KT-1900-04

How many molecules of fluorescein make a highlighted word glow? This skill-building lab serves as an introduction to fluorescence and its applications in biotechnology.





Chlorophyll Lab: A Free Resource

KT-1900-03

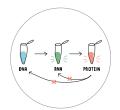
Use fluorescence to directly observe energy capture and transfer by natural photopigments — and be surprised at the result!

Introductory through intermediate





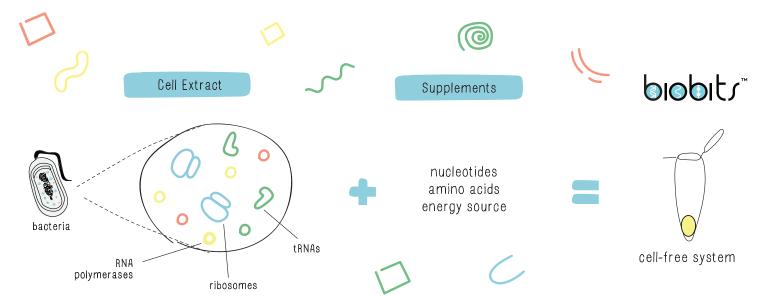
BioBits[™] is an advanced synthetic biology system ready for the classroom. Cell-free technology allows users to synthesize proteins directly in a tube by simply adding DNA. Simple to use and requiring minimal equipment, the BioBits[™] cell-free system allows you to investigate fundamental biology concepts.



BioBits™: Central Dogma

KT-1910-01

Fluorescent outputs allow students to directly visualize the flow of genetic information, from DNA to RNA to protein, all in real time.





miniPCR bio™ presents:

Genes in Space™

Genes in Space[™] is a free science competition inviting students in middle school and high school to propose pioneering DNA experiments that address a space exploration challenge. Winners have their experiments launched to the International Space Station where they are carried out by astronauts using miniPCR™ technology.

Genes in Space[™] was founded in 2015 by miniPCR bio[™] in partnership with Boeing. Since then, thousands of middle and high school students have designed real-world experiments in space biology.



"Genes in Space allowed me to make the jump from my personal science education to the real progression of human knowledge and capability."

- 2016 winner Julian Rubinfien

Become a space DNA pioneer!

- Explore a real-world topic
- Design an experiment
- Share your idea
- Win prizes
- Launch your experiment

LEARN MORE AT

www.genesinspace.org





Lab in a Box: Biotechnology loaner program from Genes in Space™

Bring hands-on DNA science and cutting-edge biotechnology to your classroom.

Sponsors and Partners:











Dr. Elaine Guevara, Madagascar

As a PhD candidate, Dr. Elaine Guevara studied lemurs in Madagascar. Bringing biological samples home to her lab at Yale wasn't allowed, so she brought her lab to the lemurs. Using a miniPCR $^{\text{TM}}$ thermal cycler run off of solar panels and batteries, she was able to collect the data she needed to measure genetic diversity in an endangered population.



Dr. Lito Abaoag, Southeast Asia

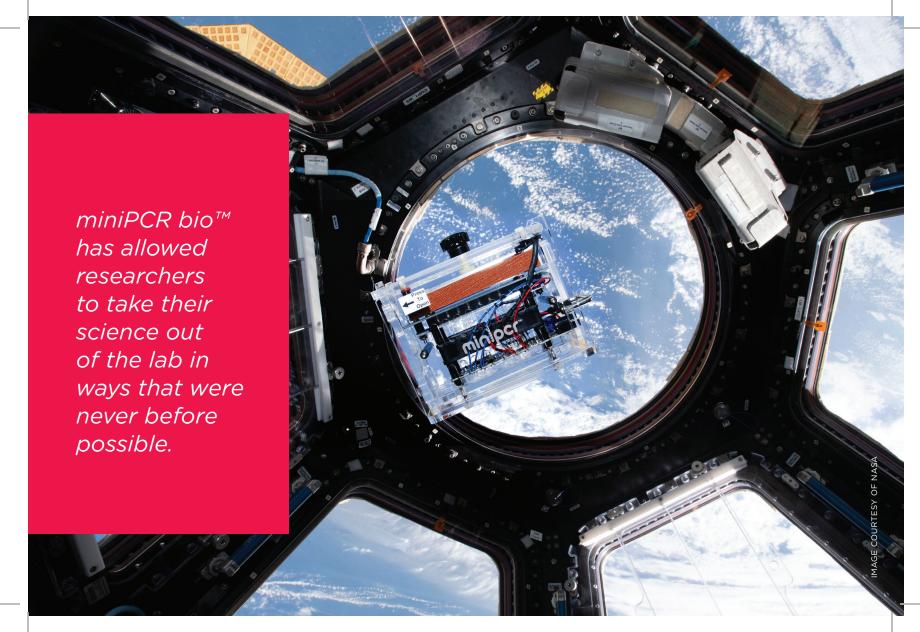
When pigs get sick, it's important to identify and treat the infection quickly; but for rural farmers, sending samples for testing can take too long. Dr. Lito Abaoag set out to tackle this problem with small-scale farmers in southeast Asia by putting together an inexpensive DNA lab toolbox built around the miniPCR™ thermal cycler and blueGel™ electrophoresis system. Now farmers can make their own diagnoses quickly enough to stave off the spread of disease.



Dr. Ian Goodfellow, Sierra Leone

When Dr. Ian Goodfellow traveled to Sierra Leone in the midst of the Ebola epidemic in 2015, he brought a truckful of lab equipment needed to track an outbreak in real time. When some of that equipment failed in his West African field lab, miniPCR™ thermal cyclers allowed him to get his sequencing operation up and running again. Before leaving, Dr. Goodfellow trained local scientists to use miniPCR™ machines, enabling them to continue monitoring outbreaks.

Where will you take science?





1770 Massachusetts Ave. Cambridge MA, 02140 781 990 8727 www.minipcr.com team@minipcr.com



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