

GEN

Genetic
Engineering
& Biotechnology
News

MEDIA KIT

2009

SINCE 1981

GEN Genetic Engineering & Biotechnology News
Volume 28, Number 13 July 2008

Biotechnology from bench to business
Clinical Research & Diagnostics
OMICS Drug Discovery Bioprocess

18 **Compound Discovery Tools Still Evolving**
New solutions streamline the process and expedite hit-to-lead activities.

50 **Peptide Boom Puts Pressure on Synthesis**
Manufacturers are striving to meet demand and capitalize on trends.

30 **Biomagnetic Separations See Increased Use**
New disciplines are discovering and embracing this versatile method.

46 **Reducing Downstream Purification Costs**
As protein titers rise, this bottleneck will continue to be problematic.

60 **Primer on Regulation of Diagnostic Assays**
What pharmaceutical manufacturers need to know now.

Conquering RNAi Delivery
Kathy Liszewski
RNA interference is a sensible expression of nature. Recent advances in RNAi are presenting obstacles in finding the right targets. Two recent "Congress" announcements include innovative strategies including traditional RNAi on the rise without also...

Sample Prep Initiatives Will Advance Proteomics
Collection and Processing Activities Are under Increasing Scrutiny
Nina Flanagan
Proteomics continues to have an increasing role in drug discovery and diagnostics development and also provides a better understanding of disease. Advances in technology are providing innovative methods to enhance protein analysis with increased focus on sample preparation. Cambridge Healthtech's recent "Proteomic Sample Prep" conference shed some light on what researchers are focusing on in proteomic analysis to the next level.

Innovative Small Molecule Nanoparticle Compound
COS-7 cells transfected with nanosized magnetic particles carrying both vector and fluorescent dye. Nanoparticles for combined delivery and imaging add novel benefits to transfection. The magnetic core is traceable in MRI and it is easily combined with other labeling entities for dual-imaging purposes.

Molecular Diagnostics
Rapid advances in research...
diagnostic gene tests...
tool for biological processes

Cryosectioning of environment

www.genengnews.com

Mary Ann Liebert, Inc. Publishers

Mary Ann Liebert, Inc. Publishers

The GEN brand works harder for you

"I have been a reader of *Genetic Engineering & Biotechnology News* for many years and regard it as an essential source of up-to-date information. There is nothing else like it!"

– Professor Sir Ian Wilmut, Director
Centre for Regenerative Medicine
University of Edinburgh

ONLY

GEN

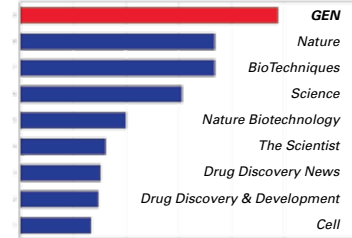
Only GEN offers advertisers:

- The deepest industry reach in biotechnology
- Must-read editorial that draws receptive readers
- An audience hungry for new technology
- Over 15 ways to broadcast your message
- The best value for your advertising dollar
- Access to an award-winning, long-standing editorial staff

Adding More Value To Your Marketing Program

Advertising is about connecting your message with places that your customers and prospects look for information. GEN is *it* for more advertisers than any other life science publication globally because GEN has the vital technology information that readers want—and many ways for them to access that information—along with your advertising message. Besides an engaged audience and the deepest penetration into the biotech industry sector, see how many ways GEN can add value to your marketing program.

GEN: #1 Choice Among Advertisers



Unique Advertisers 6/07 through 6/08
Data provided by ESSENTIA Marketing Research / www.adtrendsreports.com

GEN's Integrated Media Portfolio



MAGAZINE

- Display advertising
- Cover wraps & Inserts
- Classified advertising
- Mail list rental



e-NEWSLETTERS

- Weekly News Highlights
- Daily News Highlights
- TOC Alert
- Technology Focus



ONLINE

- genengnews.com
- Podcasts
- Webinars
- Video Channel



SUPPLEMENTS

- GEN Updates in Biotechnology
 - Print
 - Microsite
 - e-Newsletter



Editorial: Our Scope Is Your Scope

"GEN's comprehensive overviews of hot areas in biotech make it a **must read** for me and my colleagues."

– Arthur M. Krieg, M.D.
Chief Scientific Officer
Pfizer's Research Technology Center

New technologies power discovery, and discovery is what life science research is all about. That's why GEN readers want access to information about the newest technologies, latest tools, and commercial products that will help them accelerate their research.

From research all the way through bioprocess and commercial production, GEN is all about technology—new technology, technology transfer, technology commercialization, why the technology matters, and who's using what technology.

It may be the electronic age, but...

PRINT IS STILL KING!

GEN can serve you with virtually any communication method you desire. It's interesting to note that according to our studies, print is still the favorite form of information exchange in our market, and it doesn't appear to be changing.

2007 Readership Study[‡]

From where do you get your news?

Print Publications	65.4%
Websites	18.2%
e-Newsletters	12.9%
RSS Feeds	0.9%
Other	2.6%

Over the next 2 years, will you be spending more time or less with GEN (print issue)?[¥]

More time	26%
Same amount of time	70%

[‡] GEN Readership Study, Lewis and Clark, June 2007

[¥] The Informational Needs of Biotech Researchers, Martin Akel & Associates, May 2008



Send Us Your New Product Announcements

GEN welcomes your news, new product releases, tutorials and application notes. These can demonstrate your company's expertise and bring you new opportunities.

Editorial scope

GEN reports on advances that drive research, innovation, and product-line development. Every issue is organized around these themes:

- Drug Discovery
- OMICS
- Bioprocessing
- Clinical Research & Diagnostics
- Biobusiness

Full-spectrum biotechnology coverage

- Biomarkers
- Cell Culture
- Expression and Purification
- Fermentation
- Genomics
- High-content Screening
- IT and Bioinformatics
- Metabolomics
- Molecular Diagnostics
- Proteomics
- Contract Research and Manufacturing
- Compliance and Validation
- Drug Development and Clinical Trials

...and more

GEN – the most relevant and most read

GEN ranks #1 among readers[†]:

Publication I would read if I only had time to read one? **GEN**

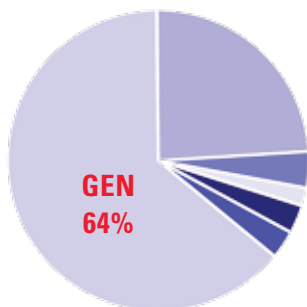
Most likely to look at what publication from cover-to-cover? **GEN**

Relevance (how the content relates to our readers' informational needs)? **GEN**



GEN is the MOST RELEVANT[†]

Publication I most look forward to receiving



- 64% GEN
- 24% Nature Biotechnology
- 4% DD&D
- 2% Drug Discovery News
- 3% BioPharm International
- 3% BioProcess International

Only GEN is so engaging and thoroughly read because it gives the most practical and necessary information compared with other life science publications.

GEN is the MOST READ

176,465 total print reach x 21 issues/year!



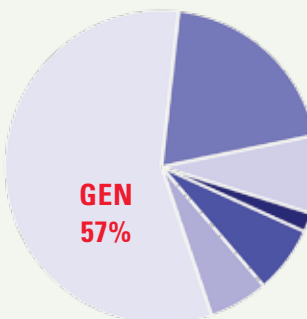
- 59,534 BPA Qualified*
- 101,208 Pass-along readership**
- 15,723 Additional distribution*
- 176,465 Total print reach

* GEN June 2008 BPA-analyzed issue
** Publisher's data

GEN provides what researchers want: In-depth coverage about emerging technologies, technology applications, technology transfer, funding, collaboration, and commercialization. That's why it's the most read biotechnology publication worldwide.

GEN is the MOST INDISPENSABLE[†]

Publication I find most useful



- 57% GEN
- 20% Nature Biotechnology
- 8% DD&D
- 2% Drug Discovery News
- 7% BioPharm International
- 6% BioProcess International

Survey data shows that GEN is consumed and valued by readers like no other comparable publication. That's what makes GEN so important for your advertising.

[†] GEN Readership Study, Lewis and Clark, June 2007

Reaching further with GEN

GEN magazine advertisers reach over

176,000 scientists worldwide

Reaching Scientists in Research, Development, and Beyond

As a trusted life science publication since 1981, GEN offers the largest access to the industry sector. Whether it's reporting on new technologies, leveraging new media, or reaching new markets, GEN's diversified portfolio of media channels attracts and engages a large audience of life scientists.

The 83/83 phenomenon^f
83% read it immediately & most read it for about 83 minutes

Your message reaches around the world with **GEN**

Circulation

- > Total market reach: **176,465[§]**
- > BPA-qualified subscribers: **59,534[◇]**
- > Widest global reach: **30%** outside the U.S.[◇]
- > Growth over last 10 years: **>100%[‡]**

No other publication but **GEN** can help you reach industry as effectively

Audience

- > Work in industry: **60%**
- > Average purchase involvement* last 12 months: **\$1,105,000**
- > GEN readers who drive purchasing decisions: **96%**

* Involvement means recommend and/or authorize purchase

GEN offers more ways and more opportunities to reach your target

Reach

- > More trade shows and meetings: **> 100 per year**
- > GEN website traffic: **> 143,000 visits per month and growing!**
- > Issues per year: **21**

[§] Includes pass-along readership and publisher's data

[◇] GEN June 2008 BPA-analyzed issue

[‡] GEN June 1998 to 2008 BPA Publisher's Statements

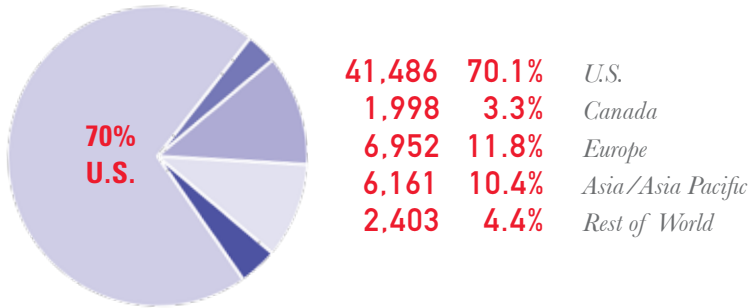
^f *The Informational Needs of Biotechnology Researchers*, Martin Akel and Associates, May 2008

“GEN helps me stay informed about new technologies and applications and updates me with pertinent information in related fields.”

- K.M. Research/Development Manager
Biopharmaceutical Company

Global reach [◇]

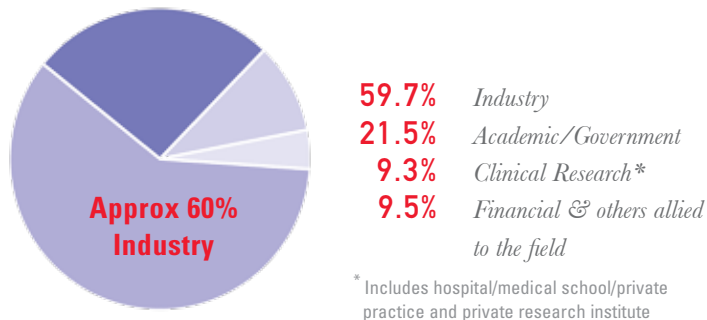
30% of GEN's readers are outside the United States



Access more life scientists worldwide. GEN provides the information that more researchers around the world want. Leverage GEN's global reach to expand your international customer base.

The deepest industry penetration ^{*}

GEN's readers work mainly in industry

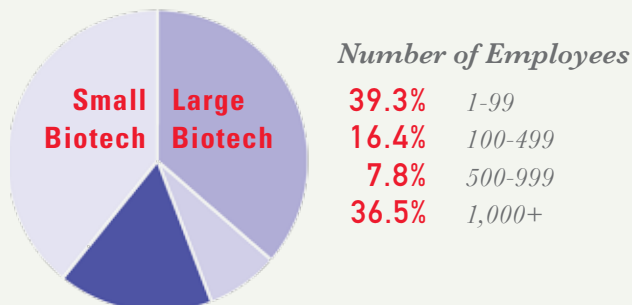


* Includes hospital/medical school/private practice and private research institute

Only GEN reaches as many life scientists in the industrial sector. That provides GEN advertisers access to some of the largest budgets and earliest adopters.

From Research to Scale-up [†]

GEN's readers work at large and small organizations



[◇] GEN June 2008 BPA-analyzed issue

[†] GEN Readership Study, Lewis and Clark, June 2007

From start-up to established pharmaceutical and biotechnology companies, GEN is on the desk and in the lab.

Our Readers · Your Customers

The GEN reader is a high-value decision maker who is interested in advertising content.

The GEN media stream gives advertisers unparalleled access to the most innovative and well-funded life science laboratories across industry, academia, and government. The labs are fast-paced, innovative, focused on the application of their technology and other technologies that will help them speed ahead with their idea, discovery or product. GEN's audience reads the advertising and responds to it—quickly—because they want to move ahead with what they're doing—especially if they can do it faster, better, or cheaper.

96% of GEN subscribers are actively involved in driving the technology evaluation and purchasing process.

How much purchasing power?

Over the past 12 months, GEN's average qualified reader recommended or authorized \$1.1 million worth of supplies and equipment.

GEN Readex Study, Readex Research, September 2005

Product Category	% Purchasing in the Past 12 Months	Average Expenditure per Responder	Average Expenditure per Subscriber
Biochemicals/Raw Materials	73	\$162,000	\$118,260
Bioprocess Equipment and Supplies	49	\$142,000	\$ 69,580
Cell Culture-Related Reagents, Equipment, and Supplies	61	\$152,000	\$ 92,720
Computer/IT Systems and Software	73	\$176,000	\$128,480
Contract, Consulting, and Pharmaceutical Services	49	\$269,000	\$131,810
Fermentation and Cell Culture Equipment and Supplies	48	\$167,000	\$ 80,160
Lab Products and Equipment	74	\$224,000	\$165,760
Molecular Biology/Genomics Reagents, Equipment, and Services	67	\$148,000	\$ 99,160
PCR-Related Reagents and Equipment	53	\$137,000	\$ 72,610
Protein Research Reagents, Equipment, and Services	56	\$115,000	\$ 64,400
Separation and Purification Equipment and Supplies	55	\$150,000	\$ 82,500
Total Average Expenditure per Subscriber			\$1,105,440

Reader Action

Get your name in front of the most responsive readers!

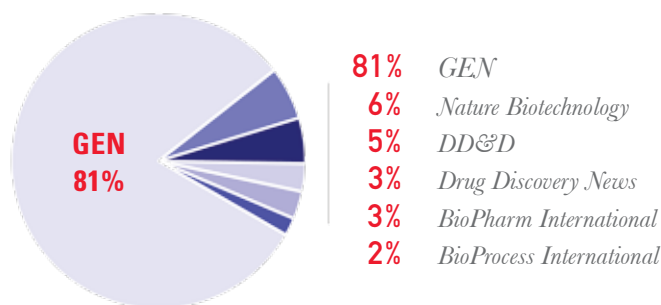
93% of subscribers respond actively to ads in GEN.

ACTION TAKEN	Visited advertiser's website	79%
	Discussed ad with others	51%
	Purchased an advertised product or service	28%
	E-mailed advertiser	12%

GEN Readex Study, Readex Research, March 2008

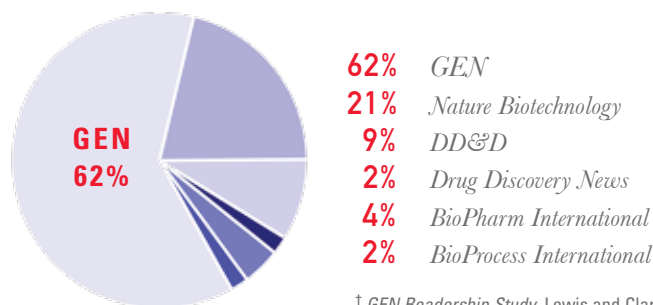
GEN readers look at the ads[†]

Where I'm most likely to look at/read the advertisements



Scientists see it in GEN first[†]

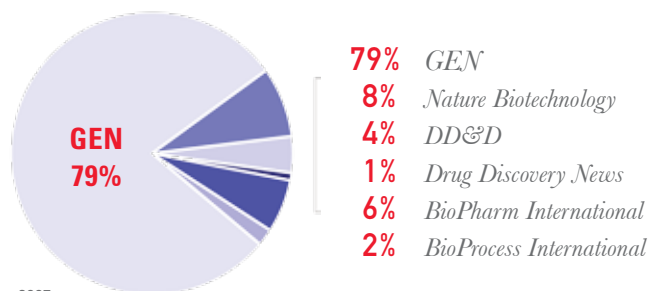
Where I usually first learn about new technology and products



[†] GEN Readership Study, Lewis and Clark, June 2007

GEN readers take action[†]

Where I'm most likely to take action to learn about products in the ads



Why GEN and not other publications? GEN readers...[‡]

Read GEN to stay up to date with new technology platforms and tools	90.2%
Are likely to look at and read advertisements	83%
Read GEN to learn how new technologies are being applied in real-life situations	78.7%
Feel that GEN is the most important read or among the most important	74%
Read GEN almost immediately or soon after it arrives	83%
Spend this time reading each issue, on average	83 min.
Prior to reading GEN , were unlikely to see similar information elsewhere	73%

[‡] The Informational Needs of Biotechnology Researchers, Martin Akel and Associates, May 2008

An integrated approach: target or turn up the volume on your message

The GEN information stream serves life scientists in a host of ways—from different content through different media broadcasts to different audience types and market sectors. Although GEN magazine in print remains the primary source of information for over 65% of scientists polled, GEN's electronic media offerings are popular, growing, and tailored for relevance to their respective audiences. Talk to your GEN sales manager for recommendations about the best media mix for your marketing plan.

PRINT MEDIA

Display, Classified, Direct Mail, & Special Publications

Advertising in Genetic Engineering & Biotechnology News

■ RUN OF BOOK AND PREFERRED POSITION ADS

Nothing compares to magazine display advertising to build brand awareness and product preference. GEN places your ad in the perfect editorial environment, and GEN's glossy paper stock and size make your ad stand out and get noticed.

■ COVER WRAPS & INSERTS

Turn up the visibility of your advertising with GEN's unique full-page tabloid size cover wraps or your campaign insert.

■ CLASSIFIEDS & MARKETPLACE

Find the best candidates for a job opening, publicize a scientific meeting, or promote a new service with an ad in our Classifieds & Marketplace section.

GEN Updates in Biotechnology

Become an exclusive sponsor of a theme-based Supplement. GEN Updates are a series of technology-focused supplements that offer sponsors the opportunity to promote their brand within the context of a specific subject matter. Updates can be print, electronic, or both. Print Updates are mailed to GEN subscribers and make great trade-show handouts.



Mail List Rental

GEN can customize a cost-effective direct mailing strategy, letting you select job titles, areas of focus, and types of organizations. Or you can mail literature to our entire list.



ELECTRONIC MEDIA

GEN Online, e-Newsletters, GENcast Network, Webinars

GEN Online – genengnews.com

■ Bringing you breaking news (updated every 20 minutes), archived articles, podcasts, key word searches, updates, and more. Over 143,000 visits a month...and growing. Multiple-sized banner opportunities are available.



e-Newsletters

■ TOC ALERTS

A preview of the next issue of GEN is sent to 29,000 readers. Text sponsorships are available.



■ GEN NEWS HIGHLIGHTS

We deliver the day's most important news headlines with links to articles on our site. Advertise to opt-in subscribers who need to follow the latest news. We also deliver a weekly highlights edition every Friday.



■ TECHNOLOGY FOCUS

This is a single-sponsor HTML newsletter targeted in content and distribution. Sponsors can choose to have the Technology Focus sent to the entire GEN e-circulation list or to a portion based on demographic profiles.



GENcast Network

■ PODCASTS

GEN's weekly podcasts deliver provocative interviews with biotech leaders. Sponsors receive a 15-second introductory message in both the interview and news briefs. Sponsor's logos are also displayed on the dedicated GENcast section of our website and on the associated GENcast e-Alert.



■ VIDEO CHANNEL

Use our website as a distribution channel for your corporate or product video. The GENcast video network will feature sponsor videos that appear on our homepage for one month, and are then archived for an additional three months.



■ WEBINARS

GEN's web-based seminars and panel discussions capture the attention of a targeted audience, with unique content delivered in streaming audio or video. This exclusive sponsorship opportunity produces targeted leads and long-lasting impact.



Advertiser Loyalty Benefits

Frequency Perks

Benefit	1x	2x	4x	7x	9x	18x	21x
Adlink inclusion	X	X	X	X	X	X	X
GEN mail list rental		X	X	X	X	X	X
Keyword sponsorship			X	X	X	X	X
Discount on e-products			X	X	X	X	X
Purchasing Intelligence Program				X	X	X	X
Free full-page B&W ad in one Mary Ann Liebert Journal *					X	X	X
Marketing survey						X	X
Promotional e-mailing							X

*Contact your sales manager for a list of qualifying Mary Ann Liebert journal titles.

GEN's Advertiser Loyalty Program

No other magazine makes your advertising dollar go farther. Advertise in GEN and enjoy these benefits. Advertise more and get more!

Ask your sales manager how to get the most from advertising with GEN.

■ AdLink Inclusion

Your company is included in our AdLink page on genengnews.com, along with a link to a pdf of your current ad.

■ Key Word Sponsorship

You get to sponsor a key word on genengnews.com for each ad you place in GEN.

■ Discounts on e-products

Receive a discount on web and electronic newsletter banners, based on ad frequency in GEN.

■ Purchasing Intelligence Program

GEN surveys readers on a quarterly basis to see if they intend to buy various products in the next nine months. You specify the category, and we send you these high-quality leads—electronically, for easy follow up.

■ Free full-page ad

In addition to all the other frequency perks at this level, a 9x or greater frequency earns you a full-page ad in

a qualified Mary Ann Liebert journal. Ask your sales manager for a list of qualifying Mary Ann Liebert journal titles.

■ Targeted Marketing Surveys

Choose six questions you would like to ask prospective customers, and GEN will conduct a marketing survey for your company. We'll query 1,000 GEN readers and show you what they had to say.

■ Promotional e-mailing

Once a year, we will send out HTML e-mails on your company's behalf to 3,000 GEN subscribers.

Designed to thank and reward contract advertisers, GEN's Advertiser Loyalty Program provides a variety of additional exposure and lead-generating opportunities.

GEN is Your Access

"At Millipore, our Corporate tagline is *Advancing Life Science Together*. One way we are able to accomplish that work is through our long affiliation with GEN. As biotechnology's premier information source, I find GEN not only a resource but a partner in Millipore's efforts to reach key audiences and customers.

– Martin Madaus
President & CEO
Millipore Corporation

**GEN is the first pick for both advertisers and readers—
and that is no coincidence.**

ONLY

GEN

gives advertisers unparalleled access to receptive buyers in the life science marketplace, through our high-quality, diverse media channels and superb editorial content.

Let us show you how **GEN** can benefit your '09 marketing plan.

Mechanical Specs

Electronic Files

GEN works on a Macintosh® platform and can accept many different file types (see below). Additional charges may be incurred if ads are supplied in other formats.

File Types Accepted: QuarkXPress 4.0 – 6.0, Adobe Photoshop 5.0 or greater (TIFF preferred), Adobe Illustrator 8.0 or greater (EPS preferred), Adobe InDesign CS or greater, or Adobe Acrobat PDF 4.0 or greater (press-ready). PDF files cannot be altered by our office and must be supplied with fonts embedded.

Graphic Files: All color graphic files must be supplied in CMYK (not RGB), as close to final size as possible, with a resolution of 300 dpi or higher. If Illustrator or EPS files are supplied that include type, make sure it is converted to outlines. Include all fonts for text and graphic files used in ad. You must include both screen and printer fonts. We support Adobe Type 1 and Open Face fonts. If an ad is received with True Type fonts, we will match the fonts as closely as possible.

Media: We accept the following forms of media for file submission: CD-ROM or DVD-ROM disks.

Submitting Ads by e-mail or FTP: All ads that are e-mailed cannot exceed 3MB in size and should be “stuffed” or “zipped”. Please specify publication month in your e-mail subject line.

If you wish to upload an ad to our FTP site, please call for instructions. Mail or fax a proof that represents the ad as it should print. The Publisher will not be responsible for quality of reproduction if materials provided do not meet the listed specifications.

E-mail Ads to: e-file@genengnews.com

Mail All Materials to:

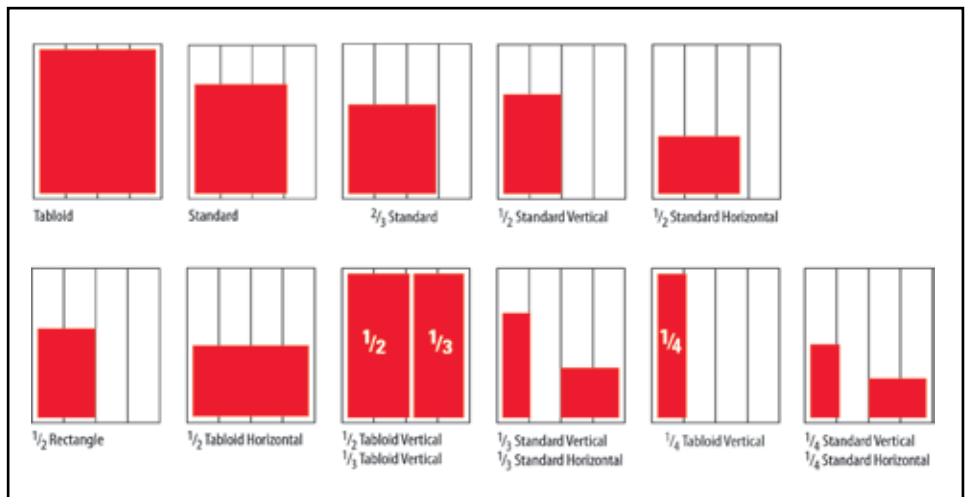
GENETIC ENGINEERING & BIOTECHNOLOGY NEWS
 Director of Advertising Production
 140 Huguenot Street, Third Floor
 New Rochelle, NY 10801

Web Submission Guidelines

- All images must be jpg or gif format
- File size may not exceed 30k
- Ad sizes are 768 x 60, 768 x 90, 120 x 600, 300 x 250
- Supply URL to use for link to banner
- Send files to: web@genengnews.com

Ad Sizes

	INCHES		MILLIMETERS	
	Width	Height	Width	Height
Cover Wrap—first page (2nd page is tabloid size)	10	8	254	203
Tabloid, no bleed	10	13 1/4	254	337
Tabloid, bleed	11 1/8	14 1/4	283	362
Live Area Tabloid, bleed	10	13 1/4	254	337
Standard, no bleed	8	10 1/8	203	257
Standard, bleed	9	10 3/4	230	273
Live Area Standard, bleed	7 3/4	10	197	254
2/3 Standard	7 1/2	8 1/2	190	216
1/2 Tabloid Horizontal, no bleed	10	6 3/4	254	171
1/2 Tabloid Horizontal, bleed	11 1/8	7 3/8	283	187
Live Area 1/2 Tabloid Horizontal, bleed	10	6 3/4	254	171
1/2 Tabloid Vertical, no bleed	5 1/2	13 1/4	140	337
1/2 Tabloid Vertical, bleed	6 1/8	14 1/4	155	362
Live Area 1/2 Tabloid Vertical, bleed	5	13 1/4	127	337
1/2 Standard Vertical	5	9 1/8	125	232
1/2 Standard Horizontal	7 1/2	5 1/8	190	130
1/3 Tabloid Vertical, no bleed	4 1/2	13 1/4	114	337
1/3 Tabloid Vertical, bleed	5 1/8	14 1/4	130	362
Live Area 1/3 Tabloid, bleed	4 1/2	13 1/4	114	337
1/3 Standard Vertical	2 3/8	9 5/8	61	245
1/3 Standard Horizontal	5	4 1/2	127	114
1/4 Tabloid Vertical	2 3/8	12	55	304
1/4 Standard Vertical	2 3/8	6 5/8	61	167
1/4 Standard Horizontal	5	3 1/2	127	88
Standard Spread, no bleed	16	10 1/8	406	257
Standard Spread, bleed—bottom only	16	10 3/4	406	273
Trim size of publication	11	14	279	355





Genetic
Engineering
& Biotechnology
News

DELIVERING THE PULSE OF THE BIOTECHNOLOGY
INDUSTRY TO SCIENTISTS WORLDWIDE

www.genengnews.com

**Genetic Engineering &
Biotechnology News**

140 Huguenot St., 3rd Floor
New Rochelle, NY 10801-5215
tel: (914) 740-2100
fax: (914) 740-2106
genengnews.com

Group Publisher

Joan Boyce
tel: (914) 740-2211
jboyce@genengnews.com

**Senior Vice President
Global Sales & Marketing
Asia Display and
Classified & Marketplace**

Harriet I. Matysko
tel: (914) 740-2182
fax: (914) 740-2112
advertising@genengnews.com

East Coast Sales Manager

Monica Lieberman
tel: (914) 740-2173
fax: (914) 740-2106
mlieberman@genengnews.com

Midwest Sales Manager

Sharon Spitz
tel: (888) ADS-4-GEN
(888-237-4436)
fax: (914) 740-2112
sspitz@genengnews.com

West Coast Sales Manager

Mary Tonon
tel: (415) 431-5333
fax: (415) 621-6494
matonon@ix.netcom.com

**Europe & Australia
Display and
Classified & Marketplace**

Hilary Turnbull
tel: +44 (0) 1875 825700
fax: +44 (0) 1875 825701
hturnbull@impressmedia.com

**North America
Classified & Marketplace
Sales Manager**

Victoria Palusevic
tel: (914) 740-2167
fax: (914) 740-2112
vpalusevic@genengnews.com

Dir. of Advertising Production

Anne B. Chin Aleong
tel: (914) 740-2178
achin@genengnews.com