

YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.

We encourage you to take advantage of Internet or telephone voting.

Both are available 24 hours a day, 7 days a week.

Internet and telephone voting is available through 11:59 PM Eastern Time the day prior to the shareholder meeting date.

Genta Incorporated

INTERNET

<http://www.proxyvoting.com/gnta>

Use the Internet to vote your proxy. Have your proxy card in hand when you access the web site.

OR

TELEPHONE

1-866-540-5760

Use any touch-tone telephone to vote your proxy. Have your proxy card in hand when you call.

If you vote your proxy by Internet or by telephone, you do NOT need to mail back your proxy card.

To vote by mail, mark, sign and date your proxy card and return it in the enclosed postage-paid envelope.

Your Internet or telephone vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card.

WO#
07827

▼ FOLD AND DETACH HERE ▼

Please mark your votes as indicated in this example



The Board of Directors recommends a vote "FOR" Proposals 1 and 2.

FOR AGAINST ABSTAIN

1. To authorize our Board of Directors, in its discretion, to effect up to two reverse stock splits of our outstanding Common Stock at any ratio from 1-for-2 up to 1-for-500.

2. To approve an amendment and restatement of our 2009 Stock Incentive Plan to change the number of shares of Common Stock authorized under our plan.

Mark Here for
Address Change
or Comments
SEE REVERSE



Please sign exactly as your name(s) appears on your stock certificate. If signing as attorney, executor, administrator, trustee or guardian, please indicate the capacity in which signing. When signing as joint tenants, all parties to the joint tenancy must sign. When the proxy is given by a corporation, it should be signed by an authorized officer.

Signature _____ Signature _____ Date _____

Choose **MLinkSM** for fast, easy and secure 24/7 online access to your future proxy materials, investment plan statements, tax documents and more. Simply log on to **Investor ServiceDirect[®]** at www.bnymellon.com/shareowner/equityaccess where step-by-step instructions will prompt you through enrollment.

Important notice regarding the Internet availability of proxy materials for the Annual Meeting of shareholders. This Proxy Statement and the 2010 Annual Report on Form 10-K to Stockholders are available at: <http://bnymellon.mobular.net/bnymellon/gnta>

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GENTA INCORPORATED
PROXY SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
FOR SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON OCTOBER 21, 2011

The undersigned stockholder of Genta Incorporated (the "Company") acknowledges receipt of the Notice of Special Meeting of Stockholders and the Proxy Statement, each dated September 22, 2011, and the undersigned revokes all prior proxies and appoints Raymond P. Warrell, Jr., M.D. and Gary Siegel, and each of them, as proxies for the undersigned, each with full power of substitution, to vote all shares of Common Stock of the Company which the undersigned is entitled to vote at the Company's Special Meeting of Stockholders to be held Connell Corporate Park, 300 Connell Drive, Building 300, Day's Café 2nd Floor, Berkeley Heights, New Jersey at 9:00 a.m., local time, on October 21, 2011 and at any postponement or adjournment thereof, and the undersigned authorizes and instructs said proxies or their substitutes to vote as follows:

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED IN THE MANNER DIRECTED HEREIN BY THE UNDERSIGNED. IN THE ABSENCE OF DIRECTION, THIS PROXY WILL BE VOTED "FOR" PROPOSALS 1 AND 2 AND IN ACCORDANCE WITH THE JUDGMENT OF THE PROXIES, FOR OR AGAINST ANY OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE SPECIAL MEETING AND ANY POSTPONEMENT OR ADJOURNMENT THEREOF.

Receipt of the Notice of Special Meeting and the Proxy Statement accompanying the same is hereby acknowledged.

PLEASE DATE, SIGN AND RETURN THIS PROXY PROMPTLY USING THE ENCLOSED ENVELOPE.

Address Change/Comments
(Mark the corresponding box on the reverse side)

BNY MELLON SHAREOWNER SERVICES
P.O. BOX 3550
SOUTH HACKENSACK, NJ 07606-9250

(Continued and to be marked, dated and signed, on the other side)

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