## <u>Authorization to Issue Refunding Bonds for the University of North Carolina Hospitals at Chapel Hill</u>

As part of its proposed refunding plan, the University of North Carolina Hospitals at Chapel Hill (UNC Hospitals) requests the Board of Governors to provide for the issuance of refunding bonds on or about February 12, 2009 for the purpose of current refunding a portion of the outstanding Board of Governors of The University of North Carolina University of North Carolina Hospitals at Chapel Hill Revenue Bonds, Series 1999, dated May 1, 1999, of which \$45,420,000 principal amount is currently outstanding. The UNC Health Care System Board has adopted a resolution proposing that the Board of Governors issue revenue refunding bonds for the purpose of refunding a portion of the outstanding Series 1999 Bonds. The Series 1999 Bonds are callable for optional redemption on February 15, 2009. In early February 2007, interest rates were at historically low levels. Following approval by the Board of Governors in February 2007, UNC Hospitals entered into financial arrangements through the use of an interest rate swap agreement that would lock in the current attractive interest rates in advance of the Series 2009A bond issue.

Following the Board of Governors' approval, UNC Hospitals negotiated and entered into an interest rate swap agreement on February 12, 2007, that will become effective on or about February 12, 2009 (the anticipated date of issuance of the refunding bonds). Under the terms of the interest rate swap agreement, UNC Hospitals agrees to pay a fixed rate (3.606%) to Bank of America, N.A. on a notional amount corresponding to the amount of refunding bonds expected to be issued and amortized over the term of the refunding bonds, and Bank of America agrees to pay UNC Hospitals a floating rate on the same notional amount. The refunding bonds will be issued as weekly variable rate bonds, and the floating rate payment under the interest rate swap agreement is based on an index that is expected to be closely correlated to the weekly variable

rate borne by the refunding bonds. This agreement allowed UNC Hospitals to synthetically "lock in" a fixed interest rate for the Series 2009A refunding bonds that reflected attractive interest rates at the time of the swap pricing. The fixed rate payment to be made by UNC Hospitals under the interest rate swap agreement was required to be set at a rate that resulted in net present value debt service savings of at least 4.50% of the par amount of the Series 1999 Bonds to be refunded (assuming that the floating rate received under the interest rate swap agreement is identical to the weekly variable rate paid on the refunding bonds over the life of the transaction). Assuming UNC Hospitals provides self-liquidity for the Series 2009A variable rate bonds, it is projected that UNC Hospitals will achieve net present value debt service savings of \$3.19 million or 7.34% of the par amount of the refunded bonds. The Series 2009A refunding bonds will be issued on or about February 12, 2009 pending final Board of Governors' approval.

Supplemental information concerning this transaction is attached.

It is recommended that the following resolution be approved by the Board of Governors:

RESOLUTION AUTHORIZING THE ISSUANCE, SALE AND DELIVERY BY THE BOARD OF GOVERNORS OF THE UNIVERSITY OF NORTH CAROLINA OF NOT TO EXCEED \$45,000,000 AGGREGATE PRINCIPAL AMOUNT OF UNIVERSITY OF NORTH CAROLINA HOSPITALS AT CHAPEL HILL REVENUE REFUNDING BONDS, SERIES 2009 AND APPROVING AND AUTHORIZING THE EXECUTION AND DELIVERY OF CERTAIN OTHER DOCUMENTS IN CONNECTION THEREWITH

As part of staff's due diligence on the part of the Board, below are questions asked and responses provided regarding the issuance of this debt.

Question 1: Were other financing options considered and if so, how does the risk/reward of the proposed swap transaction compare to those other financing options? For example, in 2002 UNC Chapel Hill was faced with a very similar situation when it wanted to refund its 1993 bonds but couldn't because of the call date on the bonds. Instead of a forward starting interest rate swap, the University issued traditional fixed rate bonds with a forward delivery date. That situation was different than this one in that the forward delivery period on that 2002A deal was less than a year, and on this deal it would be considerably longer (21 months). The important point here is to make sure all options were considered prior to settling on this structure.

Answer 1: A forward fixed rate bond issue or a forward swap refunding using the BMA-based swap would not produce meaningful savings. The main factor driving this deal is the use of the LIBOR-based swap which shifts tax risk to UNC Hospitals. UNC Hospitals and its advisor are fully aware of the tax risks relating to this financing structure, but believe such risks are manageable if the present value refunding savings are at the 4.50% level or above.

Question 2: What type of floating rate index is being proposed? Will Bank of America be making floating rate payments based on the BMA index or based on a percentage of LIBOR? If payments are based on a percentage of LIBOR, has the hospital been shown historical data to see how that percentage of LIBOR has compared to BMA over the past 5, 10, 15, and 20 years and are they comfortable with that risk?

Answer 2: Right now we are anticipating the floating rate arm of the swap to be 67% of LIBOR. This is what was used by UNC Hospitals on the 2003 refunding transaction. The relationship between BMA and 1-month LIBOR in 2006 was just over 67%. Also there was a significant amount of discussion and debate back in 2003 when 67% of 1-month LIBOR was selected for that swap. While there will never be a perfect percentage of LIBOR, the most important realization for UNC Hospitals is that the final savings amount will be a function of the relationship between the floating rate on the swap and the variable rate on the bonds (basis risk). Since basis risk can reduce the savings, the savings threshold for this transaction has been set higher than on a traditional refunding. The historical relationship between BMA and percentage of LIBOR from 1990 to the present was provided to UNC Hospitals.

Question 3: What will the hospital's debt mixture look like after the transaction is executed (what percent will be traditional fixed rate, variable rate, and swapped). The objective here is to make sure the hospital isn't taking on too much risk (tax risk, basis risk, counterparty risk, etc).

Answer 3: After execution of the transaction, UNC Hospital's debt mixture will be \$21.7 m or 8% fixed rate, \$101.0 m variable rate, and \$139.5 m swap.

Question 4: Will the hospital be receiving a fair market opinion from their advisor? This is very important to ensure the hospital is protected down the road if anyone comes back to ask questions about the transaction.

Answer 4: Kensington Capital Advisors will be providing a fair market pricing opinion on the swap.

Question 5: Have the fees being paid to Bank of America been disclosed in writing to the hospital? Fees on interest swaps (particularly negotiated swaps) are starting to garner more attention by the press and public.

Answer 5: There are no fees being paid to Bank of America or Bank of America Securities in connection with the swap transaction. Bank of America's compensation will be derived from the fixed rate that it offers to UNC Hospitals under the swap (subject to the fair market pricing opinion). Kensington Capital Advisors will be paid a swap advisor's fee by UNC Hospitals for services that it renders in connection with the swap, and bond counsel will charge a legal fee for services rendered in connection with the swap.

Question 6: Question for bond counsel - Is there sufficient flexibility in the resolutions to allow the hospital to modify the swap in the future if market conditions present an opportunity to improve the economics of the transaction?

Answer 6: Yes, the resolutions have sufficient flexibility. One of the possible alternatives that have been discussed is terminating the swap on the issue date and issuing fixed rate bonds. Based on the market situation at the time of issuance of the bonds, this might be a better economic alternative. We intend to have the BOG and UNC Hospitals execute appropriate documentation to treat the swap as a "qualified hedge" under federal tax laws. Then, if we decide to terminate the swap at bond closing and have to pay a termination fee in connection therewith, bond proceeds may be used to pay such termination amount. As previously stated, the BOG will be required to take further action relating to the bond issue closer to the time that the bonds are issued (to approve bond documentation, etc.). Thus, any actions necessary to terminate or modify the swap could be approved by the BOG at that time if necessary.

Question 7: Explain how self-liquidity works and the benefits of providing self liquidity.

Answer 7: Issuers of variable rate bonds must provide liquidity for these bonds in the event that the bonds cannot be remarketed. This liquidity can be provided by a third-party bank liquidity facility, or in some instances (where an issuer is highly rated and capitalized, such as UNCH) the issuer can choose to meet tender obligations on the debt through its own liquidity sources. UNCH must maintain sufficient liquid funds on hand (cash and fixed income securities in an investment account, in this instance the North Carolina Short-Term Investment Fund (STIF)) that will provide liquid funds to cover any potential remarketing failure. The ability of an issuer to liquidate assets or raise cash on a timely basis is crucial to the evaluation of an issuer to provide its own liquidity support. The rating agencies require a very specific written set of procedures detailing the steps to be undertaken by all parties to effect liquidation. The main advantage of providing self-liquidity is avoiding paying for a bank liquidity facility (currently priced at 55 bps per annum). This translates into saving approximately \$2.14 million in liquidity fees on the Series 2009A Bonds. An additional benefit of self-liquidity is that UNCH avoids the expiration and associated renewal risk (possibly in a less favorable market environment) of a third-party liquidity facility.

Question 8: How has the synthetic fixed rate swap on the Series 2003 bonds performed to date?

Answer 8: The synthetic fixed rate has performed as expected. To date, the variable rate paid by UNCH on the bonds has been approx 19 basis points above the variable rate it has received on the swap effectively raising the fixed swap rate from 3.48% to 3.67%.

RESOLUTION AUTHORIZING THE ISSUANCE, SALE AND DELIVERY BY THE BOARD OF GOVERNORS OF THE UNIVERSITY OF NORTH CAROLINA OF NOT TO EXCEED \$45,000,000 AGGREGATE PRINCIPAL AMOUNT OF UNIVERSITY OF NORTH CAROLINA HOSPITALS AT CHAPEL HILL REVENUE REFUNDING BONDS, SERIES 2009 AND APPROVING AND AUTHORIZING THE EXECUTION AND DELIVERY OF CERTAIN OTHER DOCUMENTS IN CONNECTION THEREWITH

WHEREAS, by Chapter 116 of the General Statutes of North Carolina, the Board of Governors (the "Board") of The University of North Carolina (the "University") is vested with general control and supervision of the University of North Carolina Hospitals at Chapel Hill ("UNC Hospitals") and other institutions;

WHEREAS, the Board is authorized by Sections 116-187 to 116-198, inclusive, of the General Statutes of North Carolina, as amended (the "Act"), to issue, subject to the approval of the Director of the Budget, at one time or from time to time revenue bonds of the Board for the purpose of refunding any revenue bonds issued by the Board of Governors under the Act, including the payment of any redemption premium thereon and any interest accrued to the date of redemption of such bonds;

WHEREAS, the Board is authorized by the Act to enter into all contracts and agreements necessary or incidental to the performance of its duties and the execution of its powers under the Act;

WHEREAS, the Board has heretofore issued \$58,925,000 Board of Governors of The University of North Carolina University of North Carolina at Chapel Hill Revenue Refunding Bonds, Series 1999, dated May 1, 1999 (the "Series 1999 Bonds"), of which \$45,420,000 principal amount is currently outstanding;

WHEREAS, the Board desires to issue bonds for the purpose of refunding all of the Series 1999 Bonds maturing on February 15, 2010 to 2017, inclusive, 2021 and 2024 in the aggregate principal amount of \$43,505,000 (collectively, the "Refunded Bonds");

WHEREAS, in order to provide funds, together with other available funds, to (a) refund the Refunded Bonds and (b) pay certain expenses relating to the issuance and sale of the Series 2009 Bonds (hereinafter defined), the Board desires to revenue refunding bonds in an aggregate principal amount not to exceed \$45,000,000 to be designated "University of North Carolina Hospitals at Chapel Hill Revenue Refunding Bonds, Series 2009" (the "Series 2009 Bonds") pursuant to the terms of a General Trust Indenture, dated as of January 1, 1992 (as supplemented and amended, the "General Indenture"), between the Board and First Union National Bank (succeed by U.S. Bank National Association), as trustee (the "Trustee"), and as accepted and agreed to by UNC Hospitals, and a Series Indenture Number 7, to be dated as of February 1, 2009 or such other date as is mutually agreeable to the parties (the "Series Indenture"), between the Board and the Trustee, and as accepted and agreed to by UNC Hospitals;

WHEREAS, the Series 2009 Bonds are expected to initially bear interest at weekly variable rates, subject to conversion to other interest rate modes in the manner set forth in the Series Indenture, and the Series 2009 Bonds will be subject to optional and mandatory tender for purchase and will be subject to optional and mandatory redemption from time in the manner set forth in the Series Indenture;

WHEREAS, due to existing market conditions, UNC Hospital proposes to provide its own self-liquidity for the bonds in lieu of paying the costs of procuring a liquidity facility for the refunding bonds from a bank or other financial institutions;

WHEREAS, arrangements have been made for the sale of the Series 2009 Bonds to Banc of America Securities LLC (the "Underwriter"), pursuant to a Bond Purchase Agreement, to be dated as of the date of delivery thereof (the "Bond Purchase Agreement"), among the Board, UNC Hospitals and the Underwriter;

WHEREAS, on February 12, 2007, following approval by the Board, UNC Hospitals entered into a forward starting interest rate swap agreement (the "Swap Agreement") that becomes effective February 12, 2009 (the anticipated date of issuance of the Series 2009 Bonds);

WHEREAS, under the terms of the Swap Agreement, UNC Hospitals has agreed to pay a fixed rate of 3.606% to Bank of America, N.A., as the counterparty under the Swap Agreement, on a notional amount corresponding to the amount of Series 2009 Bonds expected to be issued and amortized over the term of the Series 2009 Bonds, and Bank of America, N.A. has agreed to pay UNC Hospitals a floating rate of 67% of one-month LIBOR on the same notional amount;

WHEREAS, the floating rate payment made by Bank of America, N.A. under the Swap Agreement is expected to be substantially equivalent to the weekly variable rate borne by the Series 2009 Bonds, which will enable UNC Hospitals to synthetically "lock in" a 3.606% interest rate for the Series 2009 Bonds;

WHEREAS, the net present value debt service savings resulting from the refunding (assuming that the floating rate under the interest rate swap agreement is identical to the weekly variable rate on the refunding bonds over their entire term) is approximately 5.78%;

WHEREAS, there have been presented to the Board forms of the following documents relating to the transactions described above, which forms the Board proposes to authorize and approve, and to execute and deliver, as applicable, to effectuate the refunding of all or a portion of the outstanding Series 1996 Bonds as described above:

- (a) the Series Indenture;
- (b) the Bond Purchase Agreement;
- (c) the Official Statement, to be dated as of the date of delivery thereof (the "Official Statement"), relating to the offering and sale of the Series 2009 Bonds;

- (d) the Remarketing Agreement, to be dated as of February 1, 2009 or such other date as is mutually agreeable to the parties(the "Remarketing Agreement"), among the Board, UNC Hospitals and Banc of America Securities LLC, as remarketing agent;
- (e)the Liquidity Agreement, to be dated as of February 1, 2009 or such other date as is mutually agreeable to the parties (the "Liquidity Agreement"), between UNC Hospitals and U.S. Bank, National Association, as Trustee and Tender Agent; and
- (f)Tender Agent Agreement, to be dated as of February 1, 2009 or such other date as is mutually agreeable to the parties (the "Tender Agreement"), among the Board, UNC Hospitals and U.S Bank National Association, as Tender Agent;

NOW, THEREFORE, BE IT RESOLVED by the Board of Governors of The University of North Carolina as follows:

Section 1. Pursuant to the provisions of the Act, the Board hereby authorizes the execution, issuance and delivery of the Series 2009 Bonds in an aggregate principal amount not to exceed \$45,000,000. The forms of the Series 2009 Bonds shall be in substantially the form set forth in the Series Indenture presented to the Board at this meeting, subject to such insertions, deletions and revisions as the Chairman, the Vice Chairman or the Secretary of the Board and the President or Chief Financial Officer of UNC Hospitals, with the advice of counsel, may deem necessary and appropriate in order to comply with the provisions of the General Indenture and the Series Indenture. The Series 2009 Bonds shall mature at such times and in such amounts and shall contain such other terms as shall be set forth in the Series Indenture, subject to the provisions of this resolution.

Section 2. The Series 2009 Bonds shall be dated the date of delivery thereof, shall be initially issued as fully registered bonds in denominations of \$100,000 or any integral multiple of \$5,000 in excess of \$100,000 and shall be issued pursuant to a book-entry system as provided in the Series Indenture. Interest on each Series 2009 Bond shall initially bear interest at weekly rates in the manner set forth in the Series Indenture payable on each Interest Payment Date (as defined in the Series Indenture) until the payment in full of its principal sum. The final maturity of the Series 2009 Bonds shall not exceed February 1, 2024. The Series 2009 Bonds shall be subject to optional, extraordinary and mandatory sinking fund redemption and shall be subject to optional and mandatory tender for purchase at the times, upon the terms and conditions and at the prices as shall be set forth in the Series Indenture. The proceeds of the Series 2009 Bonds shall be applied as provided in Section 2.7 of the Series Indenture. The Series 2009 Bonds, together with any bonds heretofore or hereafter issued and outstanding under and pursuant to the provisions of the General Indenture, shall be secured on a parity basis by a pledge and lien upon the Revenues (as defined in the General Indenture) and certain other moneys made available therefor under the General Indenture, in the manner and to the extent provided in the General Indenture.

<u>Section 3</u>. The proposal set forth in the Bond Purchase Agreement submitted by the Underwriters offering to purchase the Series 2009 Bonds at the aggregate purchase price and bearing interest at the rates to be set forth therein and approved by UNC Hospitals, such purchase price to be equal to 100% of the aggregate principal amount of the Series 2009 Bonds,

less an underwriter's discount not to exceed 3.50 per \$1,000 bond, is hereby approved. The maximum interest rate on the Series 2009 Bonds shall not exceed 12.00% per annum. The Series 2009 Bonds may be sold and awarded to the Underwriter, subject to the approval of UNC Hospitals, in accordance with the terms and provisions set forth in the Bond Purchase Agreement. The Chairman and Vice Chairman of the Board and the Vice President - Finance of the University are each hereby designated to approve, on behalf of the Board, the sale of the Series 2009 Bonds to the Underwriter at such interest rates, for such purchase price and upon such terms and conditions as such persons, with the advice of counsel, shall determine as set forth in the Bond Purchase Agreement, subject to the provisions of this resolution. The Chairman and Vice Chairman of the Board and the Vice President - Finance of the University are each hereby authorized and directed, in the name and on behalf of the Board, to execute and deliver the Bond Purchase Agreement in substantially the form presented to the Board at this meeting, together with such changes, additions and deletions as such persons, with the advice of counsel, deem necessary or appropriate, such execution and delivery thereof to be conclusive evidence of the approval and authorization in all respects of the form and content thereof.

Section 4. The forms, terms and contents of the Series Indenture, the Remarketing Agreement and the Tender Agreement are in all respects authorized and approved, and the Chairman and Vice Chairman of the Board and the Vice President - Finance of the University are each hereby authorized and directed to execute and deliver the Series Indenture, the Remarketing Agreement, and the Tender Agreement for and on behalf of the Board, in substantially the forms presented to the Board at this meeting with such changes, modifications, additions or deletions as they shall, with the advice of counsel, deem necessary or appropriate, such execution and delivery thereof to be conclusive evidence of the approval and authorization in all respects of the form and content thereof.

<u>Section 5</u>. The Liquidity Agreement is hereby approved in substantially the form presented to the Board at this meeting.

Section 6. The Official Statement relating to the offering for sale of the Series 2009 Bonds is hereby authorized and approved. The Board hereby authorizes the use and distribution of the Official Statement in substantially the form presented to the Board at this meeting, together with such changes, additions and deletions as the Chairman or Vice Chairman of the Board or the Vice President - Finance of the University shall, with advice of counsel, deem necessary or appropriate. The Chairman and Vice Chairman of the Board and the Vice President - Finance of the University are each hereby authorized and directed to execute and deliver the Official Statement, in substantially the form presented to the Board at this meeting, together with such changes, additions and deletions as such persons shall, with the advice of counsel, deem necessary or appropriate, such execution and delivery to be conclusive evidence of the approval and authorization in all respects of the form and content thereof.

<u>Section 7</u>. The Board hereby authorizes UNC Hospitals to enter into such amendments or modifications to the Swap Agreement as may be necessary or beneficial in connection with the issuance of the Series 2009 Bonds to properly reflect the refunding transaction as set forth in this resolution.

Section 8. The Refunded Bonds are hereby called for redemption on February 15, 2009, in accordance with the General Indenture, Series Indenture Number 3, dated as of May 1, 1999 ("Series Indenture Number 3"), between the Board and the Trustee and accepted and agreed to by UNC Hospitals and the Series 1999 Bonds. Such call for redemption shall become irrevocable upon the issuance of the Series 2009 Bonds. The providing of notice of redemption in the manner provided in the General Indenture, Series Indenture Number 3 and the Series 1999 Bonds is hereby authorized, ratified and approved.

Section 9. The officers of the Board and the University are hereby authorized to execute and deliver for and on behalf of the Board and the University any and all additional certificates, documents, opinions or other papers, and to perform all other acts, including, without limitation, the filing of any financing statements or any other documents to create and maintain a security interest in the properties and revenues pledged under the General Indenture as may be required by the documents contemplated above or as they may deem necessary or appropriate in order to implement and carry out the intent and purposes of this resolution.

Section 10. The officers, agents and employees of the Board and the University are hereby authorized and directed to do all acts and things required of them by the provisions of this resolution, the Series 2009 Bonds, the General Indenture, the Series Indenture, the Bond Purchase Agreement, the Remarketing Agreement, the Liquidity Agreement and the Tender Agreement for the full, punctual and complete performance of the terms, covenants, provisions and agreements of the same.

<u>Section 11</u>. This resolution shall become effective on the date of its adoption, except for Section 8 of this resolution which shall become effective only upon the issuance of the Series 2009 Bonds.

ADOPTED this 9th day of January, 2009.

Bart Corgnati Secretary The University of North Carolina