Supplementary Materials: Impact of C-terminal Chemistry on Self-assembled Morphology of Guanosine Containing Nucleopeptides

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Figure S1: $^1$H NMR of 2',3'-O-isopropylideneguanosine-5'-carboxylic acid.

Figure S2. Characterization of purified gsGKFF-OH. A) HPLC chromatogram and B) MALDI TOF mass spectrum of gsGKFF-OH. Exact Mass: 776.32 g/mol.
Figure S3. $^1$H NMR of purified gsGKFF-OH.

Figure S4. Characterization of purified gsGKFF-NH$_2$. A) HPLC chromatogram and B) MALDI TOF mass spectrum of gsGKFF-NH$_2$. Exact mass: 775.34 g/mol.
Figure S5. $^1$H NMR of purified gsGKFF-NH$_2$.

Figure S6. Vial inversion test of nucleopeptides assembled in 20% acetonitrile (v/v). Nucleopeptide gsGKFF-OH is a loose gel after 24 hours (A) but over time stiffens to a transparent gel that holds in place during vial inversion. The hydrogel remains transparent and stable after 1 week (B). The assembled gs-GKFF-NH$_2$ remains soluble and remains a solution after 24 hours (C) and longer.
Figure S7. Second derivative FTIR spectra in the absence of KCl (solid line) and presence of 1 eq. KCl (dashed line) for nucleopeptide assemblies of gs-GKFF-OH (A) and gs-GKFF-NH₂ (B) after one week of assembly.

Figure S8. Nanofiber widths measured from TEM of gs-GKFF-OH assembled with 1 eq. KCl in 20% acetonitrile (v/v). Measurements were taken of both individual striations seen within nanofibers (A) and width of nanofibers (B). Widths were measured using ImageJ [1].

References

1) C. A. Schneider, W. S. Rasband, K. W. Eliceiri. “NIH Image to ImageJ: 25 Years of image analysis. Nat. Methods 2012, 9, 671-675.